

INDUSTRY SYMPOSIA

*Improving eating habits & recommendations for health
and wellness in the 21st century*

SYMPOSIUM PROGRAM

Date: Monday, 29 April

Time: PARALLEL SESSIONS: 13:15 - 14:45

Location: M1 (first floor)

ABSTRACT

With a rising obesity epidemic, where overconsumption is associated with the increase of non-communicable diseases, and the ageing global population linked to chronic conditions, morbidities and cognitive impairments, there is a growing need to focus on health and wellness, along with almost an obligation for nutrition and public health recommendations to evolve. Consistent with this is the accumulation of evidence behind the detrimental impact of a sedentary lifestyle, and the selection food that may have low nutrient density but delivering an excess of calories. This session will convene some of the world's foremost experts in nutrition, obesity and healthy ageing to discuss the latest emerging science, public health recommendations and the need to focus on communities in order to successfully change behaviour and improve public health.

OBJECTIVES

Panellists will discuss how rising levels of obesity, together with an ageing population and heightened consumer interest in health and wellness, have resulted in an urgent need for revised recommendations on nutrition and public health.

SYMPOSIUM SCHEDULE

13:15 - Opening remarks

Julian Cacchioli, *Herbalife Nutrition, VP Corporate Affairs EMEA & India*

13:20 - How the gut talks to the brain

Professor Carel le Roux, *PhD, Chair of Experimental Pathology at University College Dublin*

13:45 - Dietary Nutrient Density: How to stop the global obesity epidemic

Adam Drewnowski, *PhD, Director, Center for Public Health Nutrition, University of Washington*

14:10 - Gut microbial fermentation and management of body weight: possible role of prebiotics

Professor Glenn Gibson, *University of Reading*

14:35 - Questions and Answers

DETAILED OVERVIEW

13:15 - Opening remarks

Julian Cacchioli, *Herbalife Nutrition, VP Corporate Affairs EMEA & India*

13:20 - How the gut talks to the brain

Professor Carel le Roux, *PhD, Chair of Experimental Pathology at University College Dublin*

A combination of factors either consciously or unconsciously influence eating choices, all of which converge to determine what, when, why and how much we eat. This presentation will focus on how appetite and behavior drive food choice. Various biological factors can have marked influences on appetite and food choices, including neurochemical and gut hormone signals. From in utero into childhood, research has shown how chemical senses shape present and future food preferences. Genetics can also influence food choice. Behavior is also a major determinant of food choices.

Behavior is shaped in large part by biology, education, environment, and experiences learned and acquired throughout life. Interactions with family, friends, peers, and other social structures influences food choices and behaviors. Physical activity and sleep can also influence behavior that drives food choices. Understanding how these biological, chemical, physical and social factors interact to determine food choices is critical to informing public health recommendations aimed at changing or improving food choices.

13:45 - Dietary Nutrient Density: How to stop the global obesity epidemic

Adam Drewnowski, *PhD, Director, Center for Public Health Nutrition, University of Washington*

The global obesity epidemic is driven by the high reward value of an easy access to low-cost, energy-dense starches, added sugars, and vegetable oils and fats. Global dietary trends are toward diets that provide ample calories but are nutrient-poor. The low cost of empty calories means that obesity rates are rising most among lower-income groups in high income and increasingly in low- and middle-income countries (LMIC). The new nutrition needs to provide foods that are nutrient dense, affordable, culturally acceptable and appealing. High quality protein, fiber, vitamins and minerals need to be delivered -at the right price point - to the global consumer. Improving the dietary nutrients-to-calorie ratio through multiple means, including fortification of foods and the design of meals and meal replacements, is one way to stem the global obesity epidemic.

14:10 - Gut microbial fermentation and management of body weight: possible role of prebiotics

Professor Glenn Gibson, *University of Reading*

The human gut is now seen to be pivotal in influence health and wellbeing. Much of this is driven by the complex collection of bacteria that reside in the intestinal tract, known as the microbiota. Numbers and activities gradually increase from the stomach to the small intestine then large intestine. This is dictated by a gradient of nutrients sources as well as indigenous factors like residence time and pH. Suffice to say that the large intestine (colon) is the most heavily colonised organ we have, with estimations that it contains over 10 times more bacterial cells than there are human cells in the entire body. As such, we should recognise that its functions can markedly influence health status. There is accumulating evidence that gut bacteria are involved in the pathogenesis of many digestive disorders. One way of controlling this is to target components of the microbiota that are positive for health and repress the more negative entities. Prebiotics are being researched for this effect, including in terms of appetite regulation and implications for metabolic syndrome.

14:35 - Questions and Answers

ABOUT THE SPEAKERS

Professor Carel le Roux, PhD



Professor Carel le Roux (MBChB, MSc, FRCP, FRCPath, PhD) graduated from medical school in Pretoria South Africa, completed his Senior House Officer training at Barts and The London Hospital, his SpR training in metabolic medicine at the Hammersmith Hospitals and his PhD at Imperial College London. He accepted a Chair as Head of Pathology at University College Dublin in 2011. He received the President of Ireland Young Researcher Award from science Foundation Ireland, a Clinician Scientist Award from the National Institute Health Research in the UK and a Wellcome Trust Clinical Research Fellowship amongst others.

Working within the Diabetes Complications Research Centre the focus of his research is primarily concerned with increased mortality and morbidity associated with obesity and diabetes. A better mechanistic understanding of how the “gut talks to the brain” will allow safer and more effective treatments to be used in future.

Adam Drewnowski, PhD



Dr. Drewnowski is a world-renowned leader in the study of obesity and social disparities in diets and health. He is the Director of the Center for Public Health Nutrition and Professor of Epidemiology at the School of Public Health, University of Washington. He is Adjunct Professor of Medicine and the Director of the UW Center for Obesity Research.

Dr. Drewnowski is the inventor of the Nutrient Rich Foods Index, which rates individual foods based on their overall nutritional value, and the Affordable Nutrition Index, which helps consumers identify affordable healthy foods. He has been the leader in studies of spatial epidemiology of diets and health, using innovative GIS approaches to study the geographic distribution of food spending, diet quality and obesity rates.

Dr. Drewnowski has served on the Standing Committee to Prevent Childhood Obesity of the Institute of Medicine, National Academy of Sciences and is a public trustee of the International Life Sciences Institute (ILSI).

Professor Glenn Gibson



Dr Glenn Gibson is an expert in gut health and prebiotics. He has undertaken over 50 human clinical trials and is currently researching acute and chronic gut disease, autism, obesity and probiotic/prebiotic functionality.

Dr Gibson was responsible for the initiation of the whole prebiotic concept for gut microbiota management through diet. Since 2000, he has been given Highly Cited Researcher status from Thomson Reuters which recognises the top 1% cited academics in the world. Highly cited means (in Thomson Reuters words) “the world’s most influential scientific minds and whose publications have been deemed as having exceptional impact.”

He is based at the University of Reading, but also hold an honorary professorship at Imperial College, London and visiting research positions in China and New Zealand. He has published over 450 research papers, supervised 70 PhD students, ran 135 research contracts and given over 300 conference lectures in the last 5 years.