

Better Foods for Better Health

Microbiota & Health: The challenges of a promising approach

5th edition

Organized by Fondation Mérieux

Les Pensières

Fondation Mérieux Conference Center

Veyrier-du-Lac - France

6 -8 April 2016

Supported by:



des racines pour la vie • roots for life



Background

Food safety and nutrition are major global public health challenges. By 2050 the world's population will reach nearly 9.2 billion, 34 % higher than today. In order to feed this larger, richer and more urban population, food production must increase by 70 %.

This will require ecological intensification of production and a reduction in the current inequalities with regard to consumption: reduction of undernutrition in some regions, while cutting waste and excess food consumption in others. Food waste and loss, including loss from inadequate storage currently represents 30-50% of food production.

There is an increasing awareness that good nutrition is key to building and sustaining health and well-being. A number of countries now include food nutritional quality in their public health policies, and are mobilizing their regulatory authorities and agri-food sector to address this important issue. In recent years, the agri-food industry has been investing in research and development in order to bring consumers new kinds of food that are beneficial to their health.

However, the challenges are many: to process or design food, food components and diets that improve the health and quality of life of populations while at the same time ensuring broad food delivery and affordability. Thanks to the development of new tools to explore the “-omics” (genomics, proteomics, metagenomics and metabolomics), progress has been made in understanding the links between food and health. However it has also underlined the complexity of this relationship, making evaluation of the health impact of specific foods a challenging task. New science-based models must therefore be created.

This requires a comprehensive approach and the collaboration of many stakeholders from the public and private sectors linked to agriculture and the food industry. To this end, experts from academia, international organizations, NGOs, regulatory authorities and industry already met on four occasions at Les Pensières during previous “Better Food for Better Health” meetings, to exchange on food security and nutrition issues. Acknowledging that both securing enough food and developing health-enhancing (or “functional”) foods are major issues for public health, experts agreed that the changing paradigm requires the establishment of new food delivery systems, and the design of a regulatory framework that ensures food quality without impeding innovation.

In line with the four previous symposia, this fifth “Better Foods for Better Health” symposium, organized by Fondation Mérieux with the support of Mérieux NutriSciences, will gather global experts from academia, international organizations, NGOs, regulatory authorities and industry.

This year, the symposium will:

- present new perspectives from the microbiota approach to prevent or cure disease
- evaluate the opportunities offered by novel scientific models based on microbiota studies
- discuss the need for new, harmonized tools to assess nutrition efficiency and safety
- provide a platform for increased dialogue between regulators, academia and industry



Scientific programme

Wednesday 6 April 2016

17:30 - 18:00	Registration	
18:00 - 18:15	Welcome address	Benoît Miribel Fondation Mérieux
18:15 - 19:00	Introductory lecture: nutrition, microbiota and metabolic diseases	Alexander Moschen
19:00	Welcome dinner	

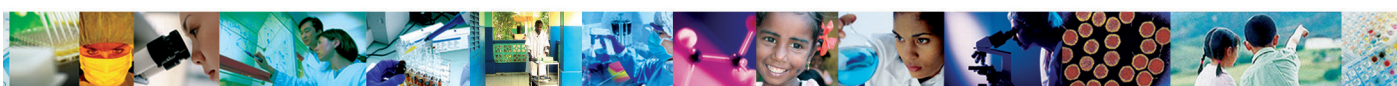
Thursday 7 April 2016

Session 1

Metabolic syndromes: obesity, diabetes, NASH, NAFLD

Chair: Hervé Blottière

8:35 - 8:55	Dietary modulation of gut microbiota contributes to alleviation of both genetic and simple obesity in children	Liping Zhao
8:55 - 9:15	The regulation of type 2 and type 3 immunity by microbiota	Gérard Eberl
9:15 - 9:35	Underlying mechanisms & causal links: high fat feeding & circadian rhythms	Eugene Chang
9:35 - 9:55	The use of fecal microbiota transplantation in obesity and insulin resistance	Max Nieuwdorp
9:55 - 10:25	Coffee break	
10:25 - 10:45	Therapy: nutritional intervention in metabolic diseases	Ellen Blaak
10:45 - 11:05	Optimizing the host-microbiota partnership to tackle obesity: the EU MyNewGut project	Yolanda Sanz
11:05 - 12:25	Roundtable (4x5 minutes presentations): technical and conceptual challenges linked to microbiota studies	Joel Dore Scott Parkinson Françoise Le Vacon Bruno Pot
12:30 - 14:15	Lunch	



Scientific programme

Session 2

Malnutrition, kwashiorkor & cachexia

Chair: Marc Bonneville

14:15 - 14:35	Microbiota signatures of under nutrition: microbiota & under nutrition in India	G.Balakrish Nair
14:35 - 14:55	Treatment options: pre & probiotics for treatment of malnutrition & cachexia	Nathalie Delzenne
14:55 - 15:15	Treatment options: antibiotics & malnutrition treatment or prophylaxis	Andrew J. Prendergast
15:15 - 15:45	Coffee break	
15:45 - 16:05	Targeting muscle in malnutrition related disorders	Johan de Vogel
16:05 - 16:25	Microbiota and Lactobacillus plantarum strains maintain growth of infant mice during chronic undernutrition by interacting with the hormonal somatotropic axis activity	François Leulier
16:25 - 16:45	Evidence-based solutions to deal with malnutrition and expected health outcomes	Greg Garrett
16:45 - 17:05	The social and ethical Issues impacting Caregivers' Access to treatment for severe acute malnutrition	Elizabeth Fox
17:05 - 17:25	Discussion	
19:00	Dinner	



Scientific programme

Friday 8 April 2016

Session 3

Microbiota, nutrition and healthy living

Chair: Gérard Eberl

8:20 - 8:40	Role of the early-life intestinal microbiota in the development of asthma	Brett B. Finlay
8:40 - 9:00	Gut microbial metabolism of plant-food bioactives: impact on dietary exposure and cancer risk	Johanna Lampe
9:00 - 9:20	Impact of diet upon intestinal microbiota and microbial metabolites	Harry Flint
9:20 - 9:40	Dissecting diet-microbe interactions and their impact to cardiometabolic health	Federico Rey
9:40 - 10:00	Coffee break	
10:00 - 11:00	Industry roundtable	Harro Timmerman Douwina Bosscher Patrice Malard Keith Garleb
11:00 - 11:45	Regulatory roundtable -DG Health & Food Safety EU -Brazilian authority in food safety -Global regulatory barriers to innovation	Stephanie Bodenbach Carlos Gouvea Manfred Ruthsatz
11:45 - 12:15	Financial perspectives on the emergence of a microbiome based industry: sorting out the hype from the hope?	Isabelle de Cremoux
12:15 - 12:30	Closing Remarks	Marc Bonneville
12:30	End of Meeting	

