

TNO

Beneficial Microbes Conference

PROGRAMME AND
REGISTRATION

TNO | Knowledge for business



International conference
on the health impact
and future potential
of beneficial microbes

NH Barbizon Palace Hotel, Amsterdam, the Netherlands

29-30 May 2008

Welcome

With great pleasure we present to you the conference programme of the 'TNO Beneficial Microbes Conference' to be held at 29-30 May 2008 in the NH Barbizon Palace Hotel in Amsterdam, the Netherlands.

The microbiota in the gastro-intestinal tract of man and animals has been shown to be important for health and disease. For instance, a clear role has been established for the endogenous microbiota in inflammatory diseases such as ulcerative colitis and Crohn's disease. But also a role in colon cancer has been suggested. Even a role in such diverse diseases or disorders as obesitas and autism has been postulated.

Moreover, over the past decades, the benefit of probiotics has been shown in various areas, including allergy, inflammatory disease, competitive exclusion of pathogens, stool habit, and even reduction of sick-days in the case of flu or stress at work. Furthermore, probiotics and prebiotics are used in infant formula to direct the development of the endogenous microbiota. For probiotics, an interaction with the mucosal immune system seems the major mechanism by which these beneficial microbes exert their benefit to the host. Numerous hypotheses on how they might work have been postulated recently. The role of prebiotics in directing the composition and activity of the endogenous microbiota is also studied widely.

The TNO Beneficial Microbes Conference will highlight the most recent advances in the understanding of the mechanisms behind the health benefit of probiotics and how the endogenous microbiota influences health and disease. Novel tools will be presented and the implementation of the '-omics' technology in this research area will be highlighted. An important aspect is application of beneficial microbes, both probiotics and through the endogenous microbiota, for product development in food and feed industry.

The specific topic areas are the interplay between beneficial microbes and nutrition, the epithelium, the immune system and future developments in the field of beneficial microbes in the food and feed industry.

We aim at a networking meeting to inform you on the latest scientific developments and the industry's requirements and to create a European platform for the new initiatives for the application of beneficial microbes in the food and feed industry.

On behalf of the organising committee,



Marjorie Koenen

Organising Committee

Mrs. Dr. Marjorie Koenen, TNO Quality of Life, the Netherlands

Dr. Koen Venema, TNO Quality of Life, the Netherlands

Prof.dr. Jerry Wells, Wageningen University/TNO Quality of Life, the Netherlands

For information on the Beneficial Microbes and/or Gut Health research programs within TNO, please contact:

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Thursday 29 May 2008

Welcome by TNO

09.00 **Opening**

09.15 **Keynote lecture:**
Beneficial Microbes: from Metchnikoff to revolutions, revelations and new frontiers

Prof.dr. Jerry Wells

Wageningen University/ TNO Quality of Life, the Netherlands

Morning chair:

Prof.dr. Willem de Vos, *Wageningen University, the Netherlands/Helsinki University, Finland*

Interplay between nutrition and beneficial microbes

10.00 **New approaches to understand microbial fermentation in the gut**

Dr. Koen Venema

TNO Quality of Life, the Netherlands

10.30 **Development of intestinal microbiota and the impact of diet and lifestyle**

Prof.dr. Willem de Vos

Wageningen University, the Netherlands/Helsinki University, Finland

11.00 **Networking break: coffee and tea**

11.30 **Metabolic profiling of the human-microbe superorganism**

Dr. Elaine Holmes

Imperial College, University of London, UK

12.00 **The health impact of prebiotics**

Dr. Fred Brouns

Cargill, Belgium

12.30 **Benefits of probiotics for animal nutrition and health**

Dr. Frederique Chaucheyras-Durand and Dr. Henri Durand,

Lallemand SAS, France

13.00 **Lunch**

GENERAL INFORMATION

Who should attend?

The 'TNO Beneficial Microbes Conference' is a meeting and networking point for the food and feed industry, regulatory authorities, consulting agencies and advisors, and scientists in the area of beneficial microbes.

Venue

The 'TNO Beneficial Microbes Conference' will be held 29-30 May 2008 at the NH Barbizon Palace Hotel (www.nh-hotels.com) in Amsterdam, the Netherlands.

NH Barbizon Palace Hotel is located in the very heart of Amsterdam, a stone's throw from the main entertainment and shopping areas as well as from the

financial district. This unique five-star hotel is partly built behind the restored facades of 19 historic buildings, most of which date from the 17th century, the Dutch Golden Age.

NH Barbizon Palace Hotel is within easy reach by train from Amsterdam Airport Schiphol (departures every 15 minutes). The hotel is located just in front of Amsterdam Central Station.

Afternoon chair:

Dr. Koen Venema, *TNO Quality of Life, the Netherlands*

Beneficial microbes and the epithelium

- 14.00 Commensals and probiotics that enhance the epithelial barrier function**
Prof.dr. Dirk Haller
Technische Universität München, Germany
- 14.30 Visceral sensitivity and the modulation of pain receptors by *Lactobacillus***
Prof.dr. Pierre Desreumaux
Inserm, France
- 15.00 Interactions of probiotic bacteria and *E.coli* in the intestinal tract**
Dr. Alojz Bomba
P. J. Šafárik University in Košice, Slovakia
- 15.30 Epithelium crosstalk with the immune system**
Dr. Iliyan Iliev
European Institute of Oncology, Italy
- 16.00 Networking break: coffee and tea**

Beneficial microbes and the immune system

- 16.30 The topography of the intestinal immune system**
Dr. Oliver Pabst
Hannover Medical School, Germany
- 17.00 Microbes that shape the development of the immune system**
Dr. Sarkis Mazmanian
California Institute of Technology, USA
- 17.30 Prospects for immunomodulation by beneficial microbes**
Dr. Hans van Noort
Delta Crystallon, the Netherlands
- 18.00 Exhibition and Poster presentations at the Scientific Health Café**

Fee and discount

The registration fee for the 'TNO Beneficial Microbes Conference' includes the book of abstracts, lunches and coffee/tea as announced in the timetable and the conference dinner on Thursday 29 May 2008. The participant fee does not include hotel accommodation.

Full registration fee:

EUR 575.- (19% VAT exclusive).

Early registration discount:

Participants registering and paying before 15 April 2008 are qualified for the early registration discount, the participant fee being EUR 445.- (19% VAT exclusive).

Special registration fee:

Every paying participant may be accompanied by one participant for a special registration fee of EUR 295.- (19% VAT exclusive) provided that the following conditions are met:

- the paying participant and the accompanying participant are employed with the same company/organisation at the same location and
- the paying participant and the accompanying participant register and pay at the same time.

Morning chair:

Dr. Jan Sikkema, *Top Institute Food and Nutrition, the Netherlands*

Health applications of beneficial microbes

- 08.30** **Is there a role for probiotics in preventing intestinal dysfunctions caused by psychological stress?**
Dr. Melanie Gareau
University of Toronto, Canada
- 09.00** **Can probiotics prevent common cold and maintain health in the workplace?**
Prof.dr. Juergen Schrezenmeir
Federal Research Centre for Nutrition and Food (BfEL), Germany
- 09.30** **Disease-inhibiting potential of probiotics in models of inflammatory bowel disease**
Dr. Lex Nagelkerken
TNO Quality of Life, the Netherlands
- 10.00** **Prospects for use of functional foods in prevention of allergic diseases**
Dr. Annick Mercenier
Nestlé Research Centre, Switzerland
- 10.30** **Networking break: coffee and tea**
- 11.00** **Screening and application of beneficial microbes for infant nutrition**
Dr. Margaret Dohnalek
Abbott Laboratories, USA
- 11.30** **Anti-hypertensive effects of microbially produced bioactives**
Dr. Peter Olesen
Chr. Hansen, Denmark
- 12.00** **Probiotics in animal feed applications: concept, facts and perspectives**
Prof.dr. Carlos Simões Nunes
DSM Nutritional Products, France
- 12.30** **Lunch**

Registration

To register for the 'TNO Beneficial Microbes Conference' please fax or send the enclosed Registration Form to the Conference Secretariat.

The registration desk will open on Wednesday 28 May 2008 at 5.00 p.m.

Hotel accommodation

Participants are responsible for making their own reservations by sending the enclosed Hotel Accommodation Form to NH Barbizon Palace Hotel directly. The hotel is holding a block of rooms at a reduced rate for participants. Depending on the attendance, participants might be accommodated in other hotels than NH Barbizon Palace Hotel.

Exhibition/sponsorship

Parallel to the conference a commercial exhibition will be organised in which presentations of services and products are given. Participants of the conference have the opportunity to visit the exhibition during the various breaks. Companies and organisations interested in having an exhibition stand or in sponsoring are invited to contact the Conference Secretariat.

Friday 30 May 2008



Courtesy of S. Konstantinov, Wageningen University

Afternoon chair:

Prof.dr. Jerry Wells, *Wageningen University/ TNO Quality of Life, the Netherlands*

Future developments

- 13.30 Metagenomics: discovering new functionalities of microbes**
Dr. Dusko Ehrlich
INRA, France
- 14.00 Future scientific perspectives: Gut-Brain axis**
Prof.dr. Robert-Jan Brummer
Maastricht University/Top Institute Food and Nutrition, the Netherlands
- 14.30 Vision on beneficial microbes: 2010-2020**
Dr. Nico van Belzen
ILSI Europe, Belgium
- 15.00 Closing lecture:**
Putting microbes to work – in the end, what's really possible?
Dr. Gregor Reid
University of Western Ontario, Canada
- 15.30 End of conference**

Call for posters

Interested participants are invited to submit one-page abstracts for posters by no later than 30 April 2008.

Language

English will be the official conference language.

Internet

The latest programme details of the 'TNO Beneficial Microbes Conference' can be found at www.bastiaanse-communication.com.

It may be necessary for reasons beyond the control of the organisers to alter the content and timing of the programme or the identity of the speakers.

Conference Secretariat

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