

SEAFOODplus
invites industry representatives,
scientists and policy makers to
attend



The third Open SEAFOODplus Conference

at Arktika,
Polar Environment Centre,
Tromsø, Norway

Tuesday 30 May 2006

Plenary session

- *Seafood for a better life*

Wednesday 31 May 2006

Three parallel symposia

- *Consumer oriented seafood product development*
- *Seafood and lowering the risk of chronic diseases*
- *New developments to manage microbial seafood safety*

www.seafoodplus.org



The conference will take place at the
Arktika Conference Centre,
Polar Environment Centre, Tromsø, Norway

For registration, payment and hotel
booking please visit

www.seafoodplus.org

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Welcome reception

Monday 29 May 2006

A welcome reception will take place at 19:00 at the Polaria Museum, Strandveien, Tromsø.

The mayor of Tromsø, Hermann Kristoffersen, will welcome the SEAFOODplus participants to Tromsø.

A variety of seafood delicacies are kindly offered by Rya Produkter.

Registration for the Conference and the three symposia will take place from 19:00.

"SEAFOODplus has been running for more than two years, and with more than 200 researchers working on 20 different projects, so many results are emerging that it has been a difficult task to select this year's presentations. The quality of research results has been balanced against the interest of the seafood processing industry. This is the third open conference where SEAFOODplus results are being presented. The first conference was in Copenhagen 2004, and the second in Granville, France 2005. I am very happy that Fiskeriforskning has taken on the arrangement of this third conference in Tromsø. It will emphasise the important role this institute has in SEAFOODplus."



Torger Børresen
Coordinator
SEAFOODplus
Danish Institute for
Fisheries Research
Department of
Seafood Research



Seafood for a better life

A new dimension has been added to encourage good discussions, making the plenary session even more exciting. This has been achieved by grouping the presentations such that a certain theme is being addressed from different angles.

Each group of presentations has been composed such that researchers with different opinions are presenting their results, sometimes creating conflicting views. Towards the end of each session the researchers are invited to discuss their opinions, thus creating a more lively discussion. The audience is of course welcome to take part in these discussions.

Four main themes are addressed in this way. The first considers what consumers would like to know about seafood in contrast to how industry is prepared to deliver this information e.g. in the form of traceability.

The second theme contrasts seafood product characteristics and how these may impact the quality of life of young consumers.

The third theme addresses aquaculture and the last theme considers potential loss of nutrients by industrial processing and in household preparations.

Programme for the SEAFOODplus plenary session – Tuesday 30 May 2006 'Seafood for a better life'

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|--------------|---|--------------|---|
| 8:00 | Registration – continued | 12:25 | Lunch |
| 9:00 | Opening and welcome speeches
Helga Pedersen, Norwegian Minister of Fisheries and Coastal Affairs, Norway
Ivan C. Burkow, Managing Director, Fiskeriforskning, Norway
Ciaran Mangan, Scientific Officer, DG Research, Directorate E, Biotechnology, Agriculture & Food, Belgium
Torger Børresen, SEAFOODplus Coordinator, Danish Institute for Fisheries Research | 14:00 | Presentation of the first SEAFOODplus Associate Certificate to Angulas Aguinaga
Torger Børresen, Danish Institute for Fisheries Research, Denmark and Mercedes Careche, Consejo Superior de Investigaciones Científicas (CSIC), Spain |
| 9:30 | What consumers would like to know about seafood
Karen Brunsø, MAPP, Denmark and Wim Verbeke, Ghent University, Belgium | 14:10 | Using SmartTag as operational welfare indicator of farmed fish
Øyvind Aas-Hansen, Fiskeriforskning, Norway |
| 9:50 | Seafood traceability for the industry in the global trade
Erling Larsen, Danish Institute for Fisheries Research, Denmark | 14:30 | New sustainable feed resources and impact of nitrogen extractives in farmed rainbow trout
Anders Aksnes, Fiskeriforskning, Norway |
| 10:10 | Discussion on the consumer perspective versus the industry perspective | 14:50 | Dietary modulation of new healthy selenium compounds in farmed African catfish
Edward Schram, The Netherlands Institute for Fisheries Research (RIVO), The Netherlands |
| 10:25 | Coffee break | 15:10 | Discussion on the feed resource perspective versus the health component perspective |
| 10:45 | Seafood as the key to improve the quality of life in young European families
Inga Thorsdottir, Landspítali-University Hospital, Iceland | 15:25 | Coffee break |
| 11:05 | New knowledge about the mechanisms of seafood lipid oxidation
Charlotte Jacobsen, Danish Institute for Fisheries Research, Denmark | 15:50 | The impact of processing on nutritional benefits of seafood
Edel Elvevoll, University of Tromsø, Norwegian College of Fishery Science, Norway |
| 11:25 | Natural antioxidants: great potential for use in seafood
Isabel Medina, Consejo Superior de Investigaciones Científicas (CSIC), Spain | 16:10 | Changes in nutrients in farmed African catfish during household preparations
Narcisa Bandarra, The National Research Institute on Agriculture and Fisheries Research (IPIMAR), Portugal |
| 11:45 | Muscle proteomics as a new tool to better understand texture defects in farmed fish
Martine Morzel, Institut National de la Recherche Agronomique (INRA), France | 16:30 | Discussion on the nutrient loss during industrial processing versus household cooking |
| 12:05 | Discussion on the nutrition perspective versus the product quality perspective | 16:45 | Summary of the third SEAFOODplus Open Conference
Torger Børresen, Danish Institute for Fisheries Research, Denmark |
| | | 17:00 | Adjourn |
| | | 19:30 | Conference Banquet at Rica Ishavs hotel, Tromsø
Award for the best presentation will be announced |



Joop Luten
Local organiser
RTD team representative
SEAFOODplus
Fiskeriforskning



Consumer oriented seafood product development

In each of the symposia SEAFOODplus is showing how the ongoing research relates to activities outside SEAFOODplus. In addition to presentations from the project, some speakers not participating in SEAFOODplus has also been invited to contribute to the symposia.

In the symposium on consumer oriented seafood product development some core results from SEAFOODplus are being presented. In addition, other speakers are contributing along the same lines, showing how the seafood industry may benefit from new approaches to product development.

It is of major importance for manufacturers of seafood products to deliver to consumers seafood that has a good taste. However, the final touch of taste is delivered when the seafood is prepared for serving on the plate. Here the artistic skills of a chef can create new taste sensations. This will be demonstrated during the symposium session, to which the participants of the other symposia are also invited to take part in.

Further, one of the members of the External Advisory Board to SEAFOODplus has encouraged consideration of culinary principles for seafood preparation. This will be highlighted in one of the presentations where culinary based product development will be explained.

Programme for the SEAFOODplus Symposium no 1 - Wednesday 31 May 2006 'Consumer oriented seafood product development'

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|--------------|---|--------------|---|
| 9:00 | Opening
Joop Luten, Fiskeriforskning, Norway | 12.10 | Lunch – with product demonstrations from Angulas Aguinaga, Spain, and local Tromsø seafood producers |
| 9.10 | Success stories of seafood product development
Javier Borderias, Consejo Superior de Investigaciones Científicas (CSIC), Spain | 13.30 | Farmed cod – evaluation by chief cooks from European restaurants
Morten Heide, Fiskeriforskning, Norway |
| 9.40 | Culinary based product development for seafood and the stage gate principle
Mike Morrissey, Oregon State University, USA
Member of the SEAFOODplus External Advisory Board | 14.00 | Consumer preferences for different cod products: Why do some consumers prefer one product to another?
Kolbrun Sveinsdottir, The Icelandic Fisheries Laboratories, Iceland |
| 10.10 | Coffee break | 14.30 | How do young consumers perceive new convenience seafood products in Europe?
Svein Ottar Olsen, Fiskeriforskning, Norway |
| 10.40 | From consumer studies to seafood product design
Adriaan Kole, The Netherlands Institute for Fisheries Research (RIVO), The Netherlands | 15.00 | Coffee break |
| 11.10 | The results of the SEAFOODplus food design contest
To be announced by Adriaan Kole, The Netherlands Institute for Fisheries Research (RIVO) and demonstrated by the winner of the contest | 15.30 | Enhancement of consumer preference for frozen and thawed cod fillets by new processing methods
Jens Østli, Fiskeriforskning, Norway |
| 11:25 | Innovative seafood product development from a SEAFOODplus Associate Member's point of view
Jose Luis Hurtado, Angulas Aguinaga, Spain | 16.00 | Successful new seafood products enriched with taurine
Ronan Gormley, Ashtown Food Research Centre (Teagasc), Ireland |
| 11.40 | Plenary show with the other symposia participants: Seafood a joint for ever!
A top chief cook will present his view on seafood for European consumers and prepare seafood dishes!
Kjetil Gundersen, Gastronomic Institute, Norway | 16.30 | Summary of the symposium
Joop Luten, Fiskeriforskning, Norway |
| | | 16:45 | Adjourn |



Seafood and lowering the risk of chronic diseases

In each of the symposia SEAFOODplus is showing how the ongoing research relates to activities outside SEAFOODplus. In addition to presentations from the project, some speakers not participating in SEAFOODplus has also been invited to contribute to the symposia.

Consumer health and well-being is an important aspect for the research within SEAFOODplus. Prevention of disease through selection of the right diet is among the issues studied in the research pillar 'seafood and human nutrition'.

In this symposium emphasis is put on how one of the major diseases, cancer, can be prevented through dietary changes. This is also a specialty of one of the members of the External Advisory Board of SEAFOODplus, who will contribute with a presentation at the symposium.

Other topics related to seafood and human health are also taken up, making the scope of the symposium a broader approach to the benefits of seafood in the human diet. One of these constitutes the study of how fatty acids may impact the cognitive development of children.

As for the other symposia, this symposium will also join the presentation of the chief cook just before lunch.

Programme for the SEAFOODplus Symposium no 2 – Wednesday 31 May 2006 'Seafood and lowering the risk of chronic diseases'

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| 9:00 | Opening
Ingeborg Brouwer, Wageningen Centre for Food Science, The Netherlands | 12:10 | Lunch - with product demonstrations from Angulas Aguinaga, Spain, and local Tromsø seafood producers |
| 9:10 | Seafood and the interplay between the brain and the intestines
Robert Jan Brummer, Wageningen Centre for Food Science and University of Maastricht, The Netherlands | 13:40 | Seafood and prevention of colon cancer – potential mechanisms of action
Elizabeth Lund, Institute of Food Research, United Kingdom |
| 9:40 | Fish consumption and cancer risk: results from the European Prospective Investigation into Cancer (EPIC)
Elio Riboli and Teresa Norat, Imperial College London, United Kingdom | 14:10 | Bioactive dietary compounds in seafood and colon cancer prevention
Cindy Davis, National Cancer Institute, USA
Member of the SEAFOODplus External Advisory Board |
| 10:10 | Coffee break | 14:40 | Seafood and colorectal tumours: a meta-analysis and genetic susceptibility
Ellen Kampman, Wageningen University, The Netherlands |
| 10:40 | Seafood and guthealth
Gertjan Schaafsma, Wageningen University, The Netherlands | 15:10 | Coffee break |
| 11:10 | Farmed fish and cancer – the controversy between toxicology and epidemiology on the effect of organic pollutants
Eiliv Lund, University of Tromsø, Norway | 15:30 | Early essential fatty acid status and later cognitive development of children
Gerard Hornstra, Nutri-Search, The Netherlands |
| 11:40 | Plenary show with the other mini-symposia participants: Seafood a joint for ever!
A top chief cook will present his view on seafood for European consumers and prepare seafood dishes!
Kjetil Gundersen, Gastronomic Institute, Norway | 16:00 | Quantitative Risk - Benefit Analysis: the fish case
Nynke de Jong, National Institute for Public Health and the Environment, The Netherlands |
| | | 16:30 | Summary of the symposium
Ingeborg Brouwer, Wageningen Centre for Food Science, The Netherlands |
| | | 16:45 | Adjourn |



New developments to manage microbial seafood safety

In each of the symposia SEAFOODplus is showing how the ongoing research relates to activities outside SEAFOODplus. In addition to presentations from the project, some speakers not participating in SEAFOODplus has also been invited to contribute to the symposia.

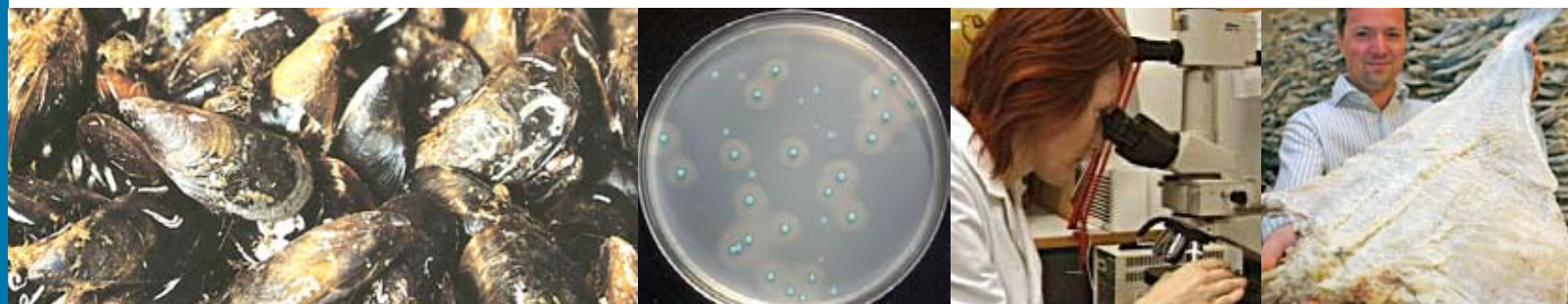
Consumers request all seafood to be safe. In SEAFOODplus the major aspect of seafood safety is the role of micro-organisms, including both viruses and bacteria. In the present symposium prevention of virus contamination in shellfish will be considered and it will be explained how risk based management may be implemented in shellfisheries. Pathogenic bacteria will also be discussed, and rapid method for detection will be presented.

Further, models to predict growth of the pathogenic bacterium *Listeria monocytogenes* will be presented. Histamine poisoning will be considered and it will be explained how a newly discovered bacterium has adapted to cause histamine production at very low temperatures. One of the members of the SEAFOODplus External Advisory Board will give a presentation on the perspective of seafood safety issues in USA.

As for the other symposia, this symposium will also join the presentation of the chief cook just before lunch.

Programme for Symposium no 3 – Wednesday 31 May 2006 'New developments to manage microbial seafood safety'

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|--------------|--|--------------|--|
| 9:00 | Opening
Bill Doré, Marine Institute, Ireland | 12.10 | Lunch – with product demonstrations from Angulas Aguinaga, Spain and local Tromsø seafood producers |
| 9:10 | A new psychrotolerant and histamine producing <i>Morganella</i> species
Jette Emborg and Paw Dalgaard, Danish Institute for Fisheries Research, Denmark | 13.40 | Risk based management of shellfisheries
Monique Pommepuy, The French Research Institute for the Exploration of the Sea (IFREMER), France |
| 9:40 | <i>Listeria monocytogenes</i>: Predicting the growth boundary in seafood
Paw Dalgaard and Ole Mejlholm, Danish Institute for Fisheries Research, Denmark | 14.10 | The industry perspective of risk based management of shellfisheries
Doug McLeod, Scottish Shellfish Association, United Kingdom |
| 10:10 | Coffee break | 14.40 | Foodborne viruses: an emerging problem?
Marion Koopmans, National Institute of Public Health and The Environment (RIVM), The Netherlands |
| 10.40 | Promising hurdle technologies to minimise the survival and growth of pathogens and spoilage bacteria in seafood during processing
Francoise Leroi, The French Research Institute for the Exploration of the Sea (IFREMER) | 15.10 | Coffee break |
| 11.10 | The growth and survival of <i>Listeria</i> in ready-to-use salt cured cod
Ingebrigt Bjørkevoll, Fiskeriforskning, Norway | 15.30 | Rapid methods for detection of <i>Vibrio</i> spp. in European seafood
Ron Lee, The Centre for Environment, Fisheries & Aquaculture Science (CEFAS), United Kingdom |
| 11.40 | Plenary show with the other mini-symposia participants: Seafood a joint for ever!
A top chief cook will present his view on seafood for European consumers and prepare seafood dishes!
Kjetil Gundersen, Gastronomic Institute, Norway | 16.00 | Seafood Safety Issues: A USA Perspective
Steve Otwell, University of Florida, USA
Member of the SEAFOODplus External Advisory Board |
| | | 16:30 | Summary of the symposium
Bill Doré, Marine Institute, Ireland |
| | | 16:45 | Adjourn |



Brokerage event

The participants of the Conference will have the opportunity to discuss with representatives from Innovation Relay Centres from Nordic countries and the SEAFOODplus ITD pillar 4 coordinator the possibilities for creating new business in seafood.

Lay-out:

Oddvar Dahl, Fiskeriforskning

Cover photos:

Frank Gregersen, Fiskeriforskning

Main photos pp 2 & 3:

Ola Røe, Røe Foto, Tromsø

Listeria photo p 7:

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Fiskeriforskning

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