

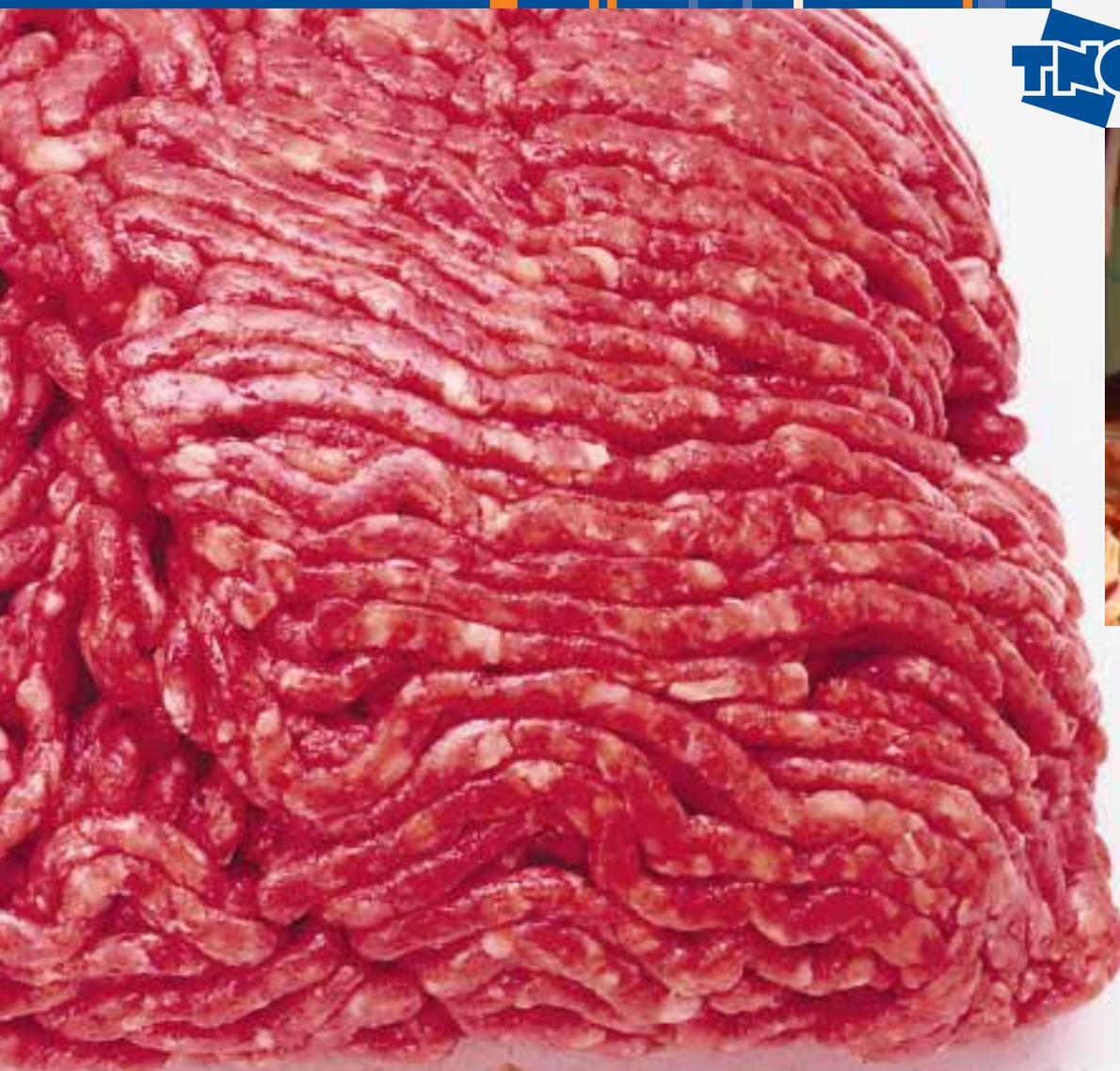
Safety and shelf life assessment of meat products in Europe

International Symposium

18 February 2005

'De Reehorst' Ede, The Netherlands

TNO Quality of Life



Safety and shelf life assessment of meat products in Europe

Topics:

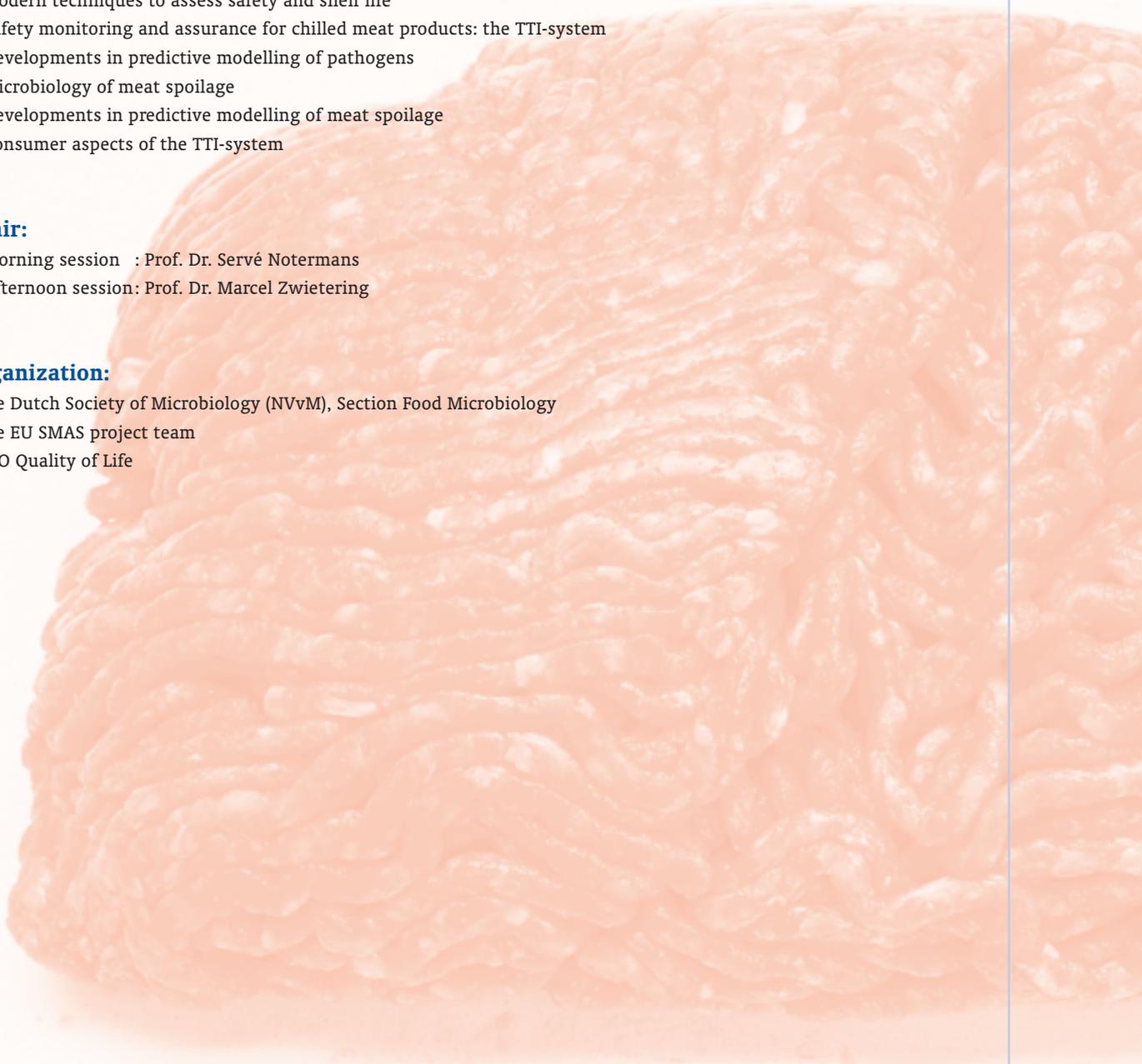
- The microbiology of meat
- Effect of physiological conditions on bacterial growth on meat
- Modern techniques to assess safety and shelf life
- Safety monitoring and assurance for chilled meat products: the TTI-system
- Developments in predictive modelling of pathogens
- Microbiology of meat spoilage
- Developments in predictive modelling of meat spoilage
- Consumer aspects of the TTI-system

Chair:

- Morning session : Prof. Dr. Servé Notermans
- Afternoon session: Prof. Dr. Marcel Zwietering

Organization:

- The Dutch Society of Microbiology (NVvM), Section Food Microbiology
- The EU SMAS project team
- TNO Quality of Life



Programme

- 9.00 Welcome with coffee and tea
- 9.30 – 9.40 Opening
- 9.40 – 10.10 **The microbiology of meat: past, present and future**
The meat chain; microbiological safety aspects; scientific gaps and research needs; TTI
Prof. Dr. Bert Urlings, Wageningen University, The Netherlands
- 10.10 - 10.40 **Bacterial growth on meat: the effect of physiological conditions**
Growth of micro-organisms on meat; surface growth versus submerged growth; microbial interactions; future of microbiological criteria
Dr. James Sheridan Teagasc, The National Food Centre, Dublin, Ireland
- 10.40 – 11.00 Coffee/Tea pause
- 11.00 – 11.30 **Modern techniques to assess shelf life and safety**
From FSOs to HACCP-criteria; building the models; principles of risk assessment; scenario analysis using the model
Ir. Erik Hoornstra, TNO Quality of Life, The Netherlands
- 11.30 – 12.00 **The EU-project: Safety Monitoring and Assurance System for Chilled Meat Products**
The objectives of the project; temperature time integrators (TTI): how do they work; TTI and microbiological safety risks; introduction of the next speakers
Prof. Petros Taoukis, National Technical University of Athens, Greece
- 12.00 – 13.00 Lunch
- 13.00 – 13.30 **Developments in predictive modelling of pathogens in the meat chain**
Models for meat products; models and TTI; scenario analysis in the meat chain
Dr. József Baranyi, Institute of Food Research, Norwich, UK
- 13.30 – 14.00 **Microbiology of meat spoilage**
General aspects of spoilage organisms; spoilage ecology as a function of process and packaging; specific spoilage indicators of shelf life
Prof. George Nychas, Agricultural University of Athens, Greece
- 14.00 – 14.20 Coffee/Tea pause
- 14.20 – 15.10 **Developments in predictive modelling of meat spoilage**
Principles of spoilage modelling; Quantitative Spoilage Assessment (QSA): a statistical approach for dating management of foods
Dr. Kostas Koutsoumanis, Aristotle University of Thessaloniki, Greece
- 15.10 – 15.40 **Consumer aspects of the TTI-system**
Lay-out of the consumer inquiry; provisional results of the inquiry; related aspects
Dr. Elisabeth Borch and Dr. Karin Wendin, SIK, Sweden
- 15.40 Drinks

Background information

EU-SMAS

EU-SMAS stands for “Development and Application of a Safety Monitoring and Assurance System for Chilled Meat Products”. The project is coordinated by the National Technical University of Athens and is running from 2003-2006. It is funded by the European Commission under the key action of Food, Nutrition and Health of the “Quality of Life and management of living resources” thematic programme, and the “Quality monitoring and traceability throughout the food chain” thematic priority, project number QLK1-2002-02545.

Basic idea. Meat products are highly perishable foods which, unless correctly stored, processed, packaged and distributed, spoil quickly and may potentially become unsafe due to microbial growth. Systematic management of meat product safety via HACCP includes raw material selection, control of conditions during processing and distribution. The latter is a weak link of the system. Conditions during transportation and at the retail level are out of manufacturer’s direct control and often deviate from specifications. Application of an optimized quality and safety assurance system for the chilled distribution of fresh meat and meat products requires continuous monitoring and control of storage conditions, from production to consumption.

SMAS. SMAS aims to develop a “Safety Monitoring and Assurance System” for meat products. It integrates kinetic models for dominant meat pathogens and spoilage bacteria, risk assessment techniques and the capacity to monitor single product temperature history with Time Temperature Integrators (TTI), into an effective chill chain decision and management tool. It is the aim to develop and optimise a TTI-system of high accuracy and suitable design for safety monitoring. Models will be refined for reliable prediction of meat safety and spoilage. SMAS will be validated under real conditions and provide the meat sector the ability to control the chill chain, and deliver to the consumer’s table safe meat products of high hygienic quality. It will satisfy the consumer that state-of-the-art methods and technology can guarantee him low risk-high quality meat products and thus help to restore the image and increase competitiveness of the EU meat sector.

Participants. 7 Institutes/companies are working on the 6 main interrelating work packages of the SMAS project. They include;

- NTUA, National Technical University of Athens, Greece;
- TNO Quality of Life, The Netherlands;
- SIK, The Swedish Institute for Food and Biotechnology, Sweden;
- Agricultural University of Athens, Greece;
- Food Safety Department, Teagasc, The National Food Centre, Ireland;
- IFR, Institute of Food Research, Norwich, United Kingdom;
- Creta Farm SA, Latzimas, Greece.

Fax-back form: + 31 317 421817

Registration

Safety and shelf life assessment of meat products in Europe

Friday February 18th, 2005

'De Reehorst', Bennekomseweg 24 Ede, The Netherlands (www.reehorst.nl)

Name : _____ M F
Company : _____
Address : _____
Postal Code : _____ City: _____
Telephone : _____ Member NVvM: yes no
E-mail : _____
Date : _____ Signature: _____

Participation costs for NVvM members (lunch included) are EUR 55,- per participant, for non-members EUR 65,- and for students EUR 30,-.

The required amount EUR _____ is on (date) _____ transferred to postgiro 40.19.050

to: Sectie LMM-NVvM at Gouda. IBAN: NL42 PSTB 0004 0190 50; BIC: PSTBNL21.

It is possible to receive a receipt at the entrance of the symposium.

Please mention the **name of the participant** when paying.

Bookings should be made before **Monday February 14th, 2005.**

You will not receive an invoice (confirmation only by e-mail).

Please send the booking form to:

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