

Successful Priority of Knowledge-Based



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Safety and quality

The Danish food sector is known worldwide for its high level of safety and quality. In addition, the level of expenses in food production has been kept low by a high degree of automation. This position has been reached through priority to food research and research-based education in a joint initiative from the Danish political system and the public and private food sectors.

Challenges like the mounting competition from low-cost countries due to globalisation, increasing elderly populations in Western Europe and growth in lifestyle diseases and obesity can only be met successfully by knowledge-based innovation, education and targeted science.

Some of the more remarkable results of knowledge-based innovation in the Danish food sector are the extremely low level of Salmonella in Danish animal production. Other results are elimination of drip loss in pork meat, optimisation of cheese and milk powder processing technologies, development of methods for enzymatic esterification of animal and vegetable fats and oils, and development of sensor technologies and advanced statistical computing in integrated food processing control.

Centre for Advanced Food Studies

All major Danish food science institutions in Denmark (see box) now collaborate within the frame of Centre for Advanced Food Studies (LMC). LMC coordinates the scientific activities and higher educations within the food area and serves as a unique partner for the private and public food sector. LMC was established in 1992, highly encouraged by the private Danish food sector.

LMC addresses the major issues for health, safety, quality and welfare by conducting innovative research across the food chain from

fork to farm, integrating the most advanced analytical techniques within "omics" and nano-science to economical and sociological sciences. A strong record of investment in state-of-the-art research facilities and constellation of these facilities and the interdisciplinary capabilities within LMC combine to make the centre unique.

Owing to the national priority, Danish food science has reached a high scientific level within a number of disciplines. Danish scientists take part in more than 30 % of the projects in the food priority of FP5 and FP6, and LMC is the only European food research collaboration, which has been awarded as a Major Research Infrastructure. These activities open a fruitful network to the benefit of the scientific level.

Research-based education

Within the frame of LMC, The Royal Veterinary and Agricultural University (KVL) and The Technical University of Denmark (DTU) offer a wide range of education ranging from bachelor and candidate programmes, PhD to continuing education.

To meet the demand for candidates from the dairy industry an in-

LMC

LMC is an interdisciplinary collaboration of research and education within food science and technology. The following institutions take part in LMC:

- The Royal Veterinary and Agricultural University (www.kvl.dk)
- Technical University of Denmark (www.dtu.dk)
- Danish Institute of Agricultural Sciences (www.agrsci.dk)
- MAPP-centre, Aarhus School of Business (www.asb.dk)
- Danish Institute for Food and Veterinary Research (www.dfvf.dk)
- Danish Institute for Fisheries Research (www.dfu.min.dk)



Please visit our website at www.lmc.dk for more information on LMC.



Food and Science

International MSc programme in Dairy Science and Technology was set up in 2004. It provides the students with a high-level, research-based teaching in dairy science and technology within an international environment.

In order to recruit international students and to prepare Danish graduates for an international career the language of LMC MSc programmes is English. An international MSc in Meat Science and Technology will be added to the range of specializations within the food area in 2005, and in 2006 an international MSc in Food Safety, Food Biotechnology, and in Food Process, Innovation and Management. The teaching activities of all the programmes are based upon or related to the ongoing research within food science and technology.

LMC focuses on continuing education and the universities' offer short courses and a master's degree in Food Quality and Safety. The master is a two-year qualifying and research-based education preparing employees in the private and public food sectors to meet the flow of challenges in relation to development, production and processing of food.

In 2003, LMC established the graduate school for LMC PhD students, FOOD. The objective of FOOD is to provide research education at the highest international standard in the field of food science and technology and to exploit opportunities for a multidisciplinary approach. The short-term courses in FOOD serve as continuing education for the private food sector. □



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