Curriculum vitae – Helle Nygaard Lærke

PERSONAL DATA

Name:	Helle Nygaard Lærke
Born:	25-12-1964
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SCIENTIFIC FOCUS AREAS

My research focuses on the role of the diet, including the content and composition of nutrients and bioactive substances on digestion, absorption, and metabolism in the nutrition of monogastric farm animals and related to human nutrition. My primary topics have been the role of carbohydrates, protein and amino acids, and associated bioactive components in foods and feeds.
My core scientific competences are: Strong knowledge in the assessment of the nutritional quality of foodstuffs, including chemical and in vitro analyses, and the establishment of chronic in vivo experimental animal models for studying digestion, absorption, and metabolism.

SCIENTIFIC EXPERIENCE, COMPETENCIES AND KNOWLEDGE

I have a strong publication record in nutrition, gastrointestinal physiology, and advanced experimental methods covering both invasive and non-invasive techniques, and experience with marker-based studies. I have a strong commitment to animal welfare and 3R principles.

EDUCATION

1993	PhD in Human Nutrition, Royal Veterinary and Agricultural University (RVAU)
1988	MSc. in Food Science, RVAU

CURRENT EMPLOYMENT and MOST RECENT PREVIOUS POSITIONS

1997- pres.	**Senior researcher,** Danish Institute of Agricultural Sciences (DJF), from 2007 at Aarhus University, Department of Animal Science/Department of Animal and Veterinary sciences (ANIVET).
2021-2022	Associate professor (part-time, 1-y temporary), Department of Clinical Nutrition, Aalborg University
1995-1997	Scientist, DIAS
1992-1995	Academic employee, DIAS
1989-1992	PhD fellow, The Research Academy/Danish Institute of Animal Science (DIAS)
1988-1989	Amanuensis (6 mo), RVAU, Dept. of Plant Food Technology

ELIGIBLE CAREER BREAKS

Parental leaves (14 months in total): Date:1997-98 (7 mo.) and 2020-21. (7 mo.)
Sick leaves: Full time, 16 wk., Nov.'19-Mar.´20, part time 15 wk. Mar '20-June'20

MANAGEMENT & LEADERSHIP EXPERIENCE

1994-2020	PI of 6 research projects funded by the Danish 3R Centre, DSF, Danish Fur breeders Associations Research Foundation, DFFE, Danish Fur breeders Association, SJVF
2003-21	Co-PI of 4 projects funded by DFFE, NKJ and NICE
2009-24	WP leader of 9 projects funded by Innovation Fund Denmark, DSF, GUDP and DCA
2015-20	Task leader Horizon 2020 project
1994-	Several minor research projects including a range of projects funded by industrial partners, and project participant of several collaboration projects within AU and between AU and other institutions including the private sector.

TEACHING AND SUPERVISION OF STUDENTS

Teaching at all university levels.

Principal supervisor for 3 PhD. students, 4 BSc. students and 6 open project BSc Students, Project supervisor for 5 PhD. students, 5 MSc students, co-supervisor for 2 ENSAMF (double-degree) Msc students, and 6 ENSAMF Internships. On-site mentoring for several ECR's, foreign visiting PhD. and MSc. Students at ANIVET.

OTHER SCIENTIFIC QUALIFICATIONS - Peer review and evaluation activities

PhD evaluation committees: 5. Ad hoc referee for several international scientific journals.

Animal experimentation permit holder for studies in pigs and rats.

BIBLIOMETRIC INFORMATION

Peer-reviewed publications: 124 (WOS core collection), 113 (Scopus)

H-index: 36 (WOS), 40 (Scopus). Citations: 4134 (WOS), 4630 (Scopus). Average citations per article: 33.34 (WOS), 40.97 (Scopus).

Full publication list (WOS): Helle Nygaard Lærke - Web of Science Researcher Profile

TEN MOST RECENT SCIENTIFIC PUBLICATIONS (2025-2021)

Knudsen, K.E.B.; Lærke, H.N.; Hedemann, M.S.; Nielsen, K.L.; Kasprzak, M.M.; Jeppesen, P.B.; Hartvigsen, M.L.; Hermansen, K. Arabinoxylan Concentrate from Wheat as a Functional Food Ingredient to Improve Glucose Homeostasis. Nutrients 2025, 17, 1561. DOI: 10.3390/nu17091561

Lærke, H. N., Ternman, E. M., Stødkilde-Jørgensen, L. & Herskin, M. S., 2025, Impact of Enrichment of Metabolic Cages with Ball-Shaped Shelters in Studies of Protein Metabolism in Rats (Rattus norvegicus) Journal of the American Association for Laboratory Animal Science. 64, 301-309. DOI:10.30802/AALAS-JAALAS-24-000018.

Lærke, H. N., Jensen, S. K., Andrade, T. A., Ambye-Jensen, M., Jørgensen, E. T. & Stødkilde, L. 2025, Towards efficient grass-clover biorefining: Influence of harvesting methods and delayed processing Animal Feed Science and Technology. 324, 116336. DOI: 10.1016/j.anifeedsci.2025.116336.

Arvidsson, L. B., Lærke, H. N., Lauridsen, C., Mikkelsen, S., Rasmussen, H. H., Cetin, Z., Østergaard, S. K. & Holst, M., 2024. A plant-based diet is feasible in patients with Crohn's disease. Clinical Nutrition ESPEN. 64, 28-36. DOI: 10.1016/j.clnesp.2024.09.003

Østergaard, S. K., Cetin, Z., Rasmussen, H. H., Lærke, H. N., Holst, M., Lauridsen, C. & Nielsen, J. L., Modulating the gut microbiota in Crohn's disease: a pilot study on the impact of a plant-based diet with DNA-based monitoring. 2024. Frontiers in Nutrition. 11, 1502967. DOI: 10.3389/fnut.2024.1502967

Xu, J., Noel, S. J., Lauridsen, C., Lærke, H. N. & Canibe, N. 2023. Liquid fermented cereals with added Pediococcus acidilactici did not reduce post-weaning diarrhea in pigs – an Escherichia coli challenge study. Frontiers in Veterinary Science. 10, 1147165. DOI: 10.3389/fvets.2023.1147165.

Lee, G. I., Nielsen, T. S., Lærke, H. N. & Bach Knudsen, K. E. 2023. The ileal and total tract digestibility fibre and nutrients in pigs fed high-fibre cereal-based diets provided without and with a carbohydrase complex Animal. 17, 100872. 10.1016/j.animal.2023.100872

Malla, N., Nørgaard, J. V., Lærke, H. N., Heckmann, L. H. L. & Roos, N. 2021. Some Insect Species Are Good-Quality Protein Sources for Children and Adults: Digestible Indispensable Amino Acid Score (DIAAS) Determined in Growing Pigs. 2022. Journal of Nutrition. 152, 1042-1051. DOI: 10.1093/jn/nxac019.

Xu, Y., Curtasu, M. V., Knudsen, K. E. B., Hedemann, M. S., Theil, P. K. & Lærke, H. N 2021. Dietary fibre and protein do not synergistically influence insulin, metabolic or inflammatory biomarkers in young obese Göttingen Minipigs. British Journal of Nutrition. 125, 828-840.

Ingerslev, A. K., Bisgaard (tidl. Rasmussen), L. R., Zhou, P., Nørgaard, J. V., Theil, P. K., Jensen, S. K. & Lærke, H. N. 2021. Effects of dairy and plant protein on growth and growth biomarkers in a piglet model. Food & Function. 12, 11625-11640. DOI: 10.1039/d1fo02092g.