

Curriculum vitae Dana W. Olijhoek

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Current position

Assistant Professor
Department of Animal and Veterinary Sciences, AU Viborg – Research Center
Foulum, Aarhus University, DK-8830 Tjele, Denmark

Work experience and academic degrees

2024- Assistant Professor in grazing systems for dairy cows with a special focus on nutrition and reduction of environmental and climate impact
2020-2024 Post doc in lowering enteric methane emission from dairy cows at Aarhus University
2015-2019 PhD in enteric methane production and residual feed intake of dairy cows at Aarhus University
2011-2014 Pre-MSc in Animal Science, and Erasmus Mundus double degree MSc program Sustainable Animal Nutrition and Feeding at Wageningen University (The Netherlands) and Aarhus University
2006-2010 BSc in Nutrition and Dietetics, The Hague University, Den Haag (The Netherlands)

Scientific area of work

Fundamental research in the field of ruminant nutrition with focus on grazing systems and nutritional strategies, including dietary additives, to lower enteric methane emission from dairy cows. Other areas include farm-scale evaluation of mitigation strategies, improving feed efficiency, and in vitro methods to measure methane production.

Teaching and supervision

Involved in teaching in several MSc courses, of which “Quantitative animal nutrition and physiology” and “Carbon cycling and climate change.” Supervision of MSc students.

Selected publications

Olijhoek, D.W., L. Mogensen, P. Lund, N.I. Nielsen, M.R. Weisbjerg, C.F. Børsting, and T. Kristensen. 2025. Perspectives on the effectiveness of applicable nutritional strategies to mitigate enteric methane over different intensive dairy production system characteristics. *Livestock Science* 294:105666.

Olijhoek, D.W., and C.F. Børsting. 2024. Dietary fat supplementation as methane mitigation strategy in heifers and dry cows and effects on performance and health. Advisory report from DCA – National Center for Food and Agriculture.

Olijhoek, D.W., M. Lamminen, A.L.F. Hellwing, M. Larsen, M.R. Weisbjerg, K.E. Bach Knudsen, and P. Lund. 2023. Effect of substituting maize silage with fresh or ensiled sugar beets on nutrient digestibility, rumen fermentation and microbial synthesis, and enteric methane emission in dairy cows. *Animal Feed Science and Technology* 303:115715.

Olijhoek, D.W., A.L.F. Hellwing, S.J. Noel, P. Lund, M. Larsen, M.R. Weisbjerg, and C.F. Børsting. 2022. Feeding up to 91% concentrate to Holstein and Jersey dairy cows: Effects on enteric methane emission, rumen fermentation and bacterial community, digestibility, production, and feeding behavior. *Journal of Dairy Science* 105:9523–9541.

Olijhoek, D.W., M.M. Thorsteinsson, M.V. Curtasu, M.O. Nielsen, and N.P. Nørskov. 2022. Identification of Potential Methane Mitigating Compounds in Ensiled Brown Seaweed *Saccharina latissima*. Proceedings of the 8th International Greenhouse Gas & Animal Agriculture Conference (GGAA), Orlando, United States, 5 to 9th of June 2022. Page 180.

- Olijhoek, D.W.**, M. Lamminen, A.L.F. Hellwing, M. Larsen, M.R. Weisbjerg, K. E. Bach Knudsen, and P. Lund. 2021. Feeding of fresh or ensiled sugar beets to dairy cows. Advisory report from DCA – National Centre for Food and Agriculture, Aarhus University. (In Danish)
- Olijhoek, D.W.**, G.F. Difford, P. Lund, and P. Løvendahl. 2020. Phenotypic modeling of residual feed intake using physical activity and methane production as energy sinks. *Journal of Dairy Science* 103:6967–6981.
- Olijhoek, D.W.**, A.L.F. Hellwing, K. Grevsen, L.S. Haveman, M.R. Chowdhury, P. Løvendahl, M.R. Weisbjerg, S.J. Noel, O. Højberg, L. Wiking, and P. Lund. 2019. Effect of dried oregano (*Origanum vulgare* L.) plant material in feed on methane production, rumen fermentation, nutrient digestibility, and milk fatty acid composition in dairy cows. *Journal of Dairy Science* 102:9902–9918.
- Olijhoek, D.W.**, P. Løvendahl, J. Lassen, A.L.F. Hellwing, J.K. Höglund, M.R. Weisbjerg, S.J. Noel, F. McLean, O. Højberg, and P. Lund. 2018. Methane production, rumen fermentation, and diet digestibility of Holstein and Jersey dairy cows being divergent in residual feed intake and fed at 2 forage-to-concentrate ratios. *Journal of Dairy Science* 101:9926–9940.
- Olijhoek, D.W.**, A.L.F. Hellwing, M. Brask, M.R. Weisbjerg, O. Højberg, M.K. Larsen, J. Dijkstra, E.J. Erlandsen, and P. Lund. 2016. Effect of dietary nitrate level on enteric methane production, hydrogen emission, rumen fermentation, and nutrient digestibility in dairy cows. *Journal of Dairy Science* 99:6191–6205.
- Olijhoek, D.W.**, A.L.F. Hellwing, M.R. Weisbjerg, J. Dijkstra, O. Højberg, and P. Lund. 2016. Effect of short-term infusion of hydrogen on enteric gas production and rumen environment in dairy cows. *Animal Production Science* 56:466–471.

For the full publication list, see: <https://pure.au.dk/portal/en/dana.olijhoek@anivet.au.dk>