

## **List of Publications in peer-reviewed scientific journals concerning the results of Bovaer/3-NOP including the animal trials (dairy cows, beef cattle and sheep)**

1. Kirwan, S. F.; Tamassia, L. F. M.; Walker, N. D.; Karagiannis, A.; Kindermann, M.; Waters, S. M. Effects of Dietary Supplementation with 3-Nitrooxypropanol on Enteric Methane Production, Rumen Fermentation, and Performance in Young Growing Beef Cattle Offered a 50:50 Forage:Concentrate Diet. *Journal of Animal Science* **2024**, 102, skad399. <https://doi.org/10.1093/jas/skad399>
2. Lokuge, G. M. S.; Maigaard, M.; Lund, P.; Rovers, T. A. M.; Larsen, L. B.; Poulsen, N. A.; Wiking, L. Physico-Chemical, Sensory and Oxidative Quality of Butter from Cows Fed 3-Nitrooxypropanol. *International Dairy Journal* **2024**, 152, 105885. <https://doi.org/10.1016/j.idairyj.2024.105885>
3. Maigaard, M.; Weisbjerg, M. R.; Johansen, M.; Walker, N.; Ohlsson, C.; Lund, P. Effects of Dietary Fat, Nitrate, and 3-NOP and Their Combinations on Methane Emission, Feed Intake and Milk Production in Dairy Cows. *Journal of Dairy Science* **2023**. <https://doi.org/10.3168/jds.2023-23420>.
4. Lupwayi, N. Z.; Hao, X.; Thomas, B. W.; Stoeckli, J.; Mesina, L.; Polo, R. O. Alteration of the Soil Microbiome and Enzyme Activities by Forage-Applied Manure from Cattle Fed the Methane Inhibitor 3-Nitrooxypropanol Supplement. *Appl. Soil Ecol.* **2023**, 183, 104765. <https://doi.org/10.1016/j.apsoil.2022.104765>.
5. Lileikis, T.; Nainienė, R.; Bliznikas, S.; Uchockis, V. Dietary Ruminant Enteric Methane Mitigation Strategies: Current Findings, Potential Risks and Applicability. *Animals* **2023**, 13 (16), 2586. <https://doi.org/10.3390/ani13162586>.
6. Kjeldsen, M. H.; Weisbjerg, M. R.; Larsen, M.; Højberg, O.; Ohlsson, C.; Walker, N.; Hellwing, A. L. F.; Lund, P. Gas Exchange, Rumen Hydrogen Sinks, and Nutrient Digestibility and Metabolism in Lactating Dairy Cows Fed 3-NOP and Cracked Rapeseed. *Journal of Dairy Science* **2023**, 0 (0). <https://doi.org/10.3168/jds.2023-23743>.
7. Kelly, L.; Kebreab, E. Recent Advances in Feed Additives with the Potential to Mitigate Enteric Methane Emissions from Ruminant Livestock. *Journal of Soil and Water Conservation* **2023**, 78 (2), 111–123. <https://doi.org/10.2489/jswc.2023.00070>.
8. Araújo, T. L. R.; Rabelo, C. H. S.; Cardoso, A. S.; Carvalho, V. V.; Acedo, T. S.; Tamassia, L. F. M.; Vasconcelos, G. S. F. M.; Duval, S. M.; Kindermann, M.; Gouvea, V. N.; Fernandes, M. H. M. R.; Reis, R. A. Feeding 3-Nitrooxypropanol Reduces Methane Emissions by Feedlot Cattle on Tropical Conditions. *Journal of Animal Science* **2023**, skad225. <https://doi.org/10.1093/jas/skad225>.
9. Almeida, A. K.; Cowley, F.; McMeniman, J. P.; Karagiannis, A.; Walker, N.; Tamassia, L. F. M.; McGrath, J. J.; Hegarty, R. S. Effect of 3-Nitrooxypropanol on Enteric Methane Emissions of Feedlot Cattle Fed with a Tempered Barley-Based Diet with Canola Oil. *Journal of Animal Science* **2023**, 101, skad237. <https://doi.org/10.1093/jas/skad237>.
10. Alemu, A. W.; Robert, G.; Zhang, X. M.; Eóin, O.; Kindermann, M.; Beauchemin, K. A. 3-Nitrooxypropanol Supplementation of a Forage Diet Decreased Enteric Methane Emissions from Beef Cattle without Affecting Feed Intake and Apparent Total-Tract Digestibility. *Journal of Animal Science* **2023**, skad001. <https://doi.org/10.1093/jas/skad001>.
11. Uddin, M. E.; Tricarico, J. M.; Kebreab, E. Impact of Nitrate and 3-Nitrooxypropanol on the Carbon Footprints of Milk from Cattle Produced in Confined-Feeding Systems across Regions in the United States: A Life Cycle Analysis. *J. Dairy Sci.* **2022**, 105 (6), 5074–5083. <https://doi.org/10.3168/jds.2021-20988>.
12. Schilde, M.; von Soosten, D.; Frahm, J.; Kersten, S.; Meyer, U.; Zeyner, A.; Dänicke, S. Assessment of Metabolic Adaptations in Periparturient Dairy Cows Provided 3-Nitrooxypropanol and Varying Concentrate Proportions by Using the GreenFeed System for Indirect Calorimetry, Biochemical Blood Parameters and Ultrasonography of Adipose Tissues. *Dairy* **2022**, 3 (1), 100–122. <https://doi.org/10.3390/dairy3010009>.



13. Pitta, D. W.; Indugu, N.; Melgar, A.; Hristov, A.; Challa, K.; Vecchiarelli, B.; Hennessy, M.; Narayan, K.; Duval, S.; Kindermann, M.; Walker, N. The Effect of 3-Nitrooxypropanol, a Potent Methane Inhibitor, on Ruminant Microbial Gene Expression Profiles in Dairy Cows. *Microbiome* **2022**, *10* (1), 146. <https://doi.org/10.1186/s40168-022-01341-9>.
14. Kebreab, E.; Bannink, A.; Pressman, E. M.; Walker, N.; Karagiannis, A.; Gastelen, S. van; Dijkstra, J. A Meta-Analysis of Effects of 3-Nitrooxypropanol on Methane Production, Yield, and Intensity in Dairy Cattle. *J. Dairy Sci.* **2022**, *0* (0). <https://doi.org/10.3168/jds.2022-22211>.
15. Hristov, A. N.; Melgar, A.; Wasson, D.; Arndt, C. Symposium Review: Effective Nutritional Strategies to Mitigate Enteric Methane in Dairy Cattle. *J Dairy Sci* **2022**, *105* (10), 8543–8557. <https://doi.org/10.3168/jds.2021-21398>.
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26. Pitta, D. W.; Melgar, A.; Hristov, A. N.; Indugu, N.; Narayan, K. S.; Pappalardo, C.; Hennessy, M. L.; Vecchiarelli, B.; Kaplan-Shabtai, V.; Kindermann, M.; Walker, N. Temporal Changes in Total and Metabolically Active Ruminant Methanogens in Dairy Cows Supplemented with 3-Nitrooxypropanol. *J. Dairy Sci.* **2021**, *104* (8), 8721–8735. <https://doi.org/10.3168/jds.2020-19862>.
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