

Feeding organic minerals to gilts and sows: effects on milk quality and litter performance

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Project Status: Completed in 2018

Even if substituting inorganic minerals with organic minerals could have a beneficial effect on sow longevity, results demonstrated that this feeding strategy does not offer any benefits in terms of sow milk composition.

Why was this study done?

The use of organic instead of inorganic minerals has recently received a lot of attention. It was previously shown that feeding organic minerals could have a beneficial effect on lameness and longevity of sows, but the potential impact on their milk composition and growth of their litters was not known.

This work was part of a larger project that looked at how the performance and physiological status of sows and their piglets could be affected by partially substituting inorganic with organic minerals. For this study, researchers focused on evaluating the impact of substituting 50% of inorganic minerals (Cu, Zn and Mn) with organic minerals on sow milk composition over the two first parities.

What was done and what was the outcome?

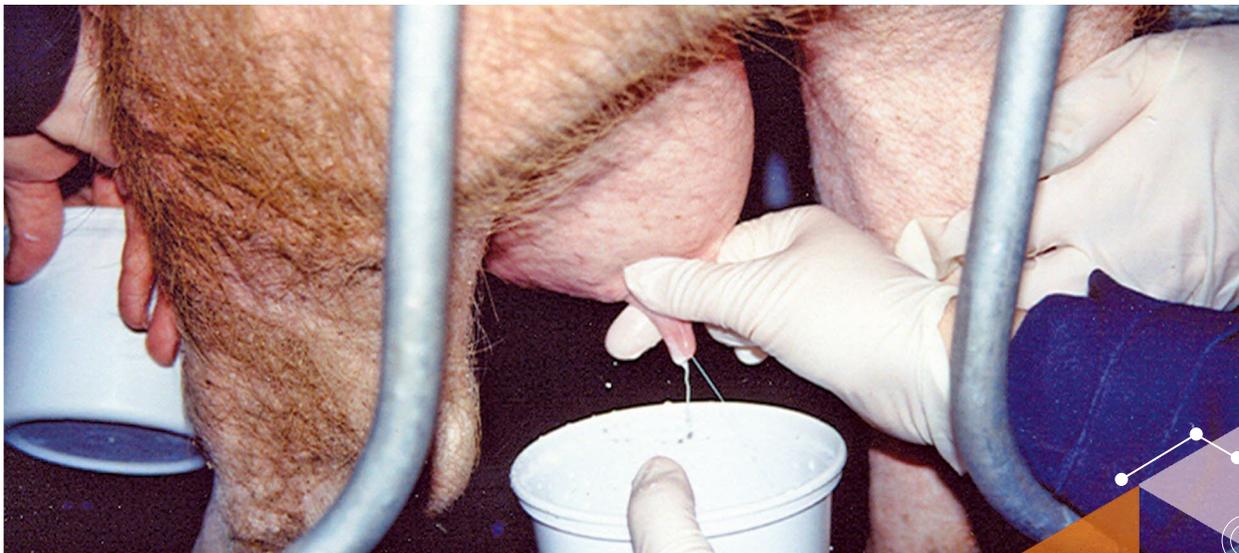
The Availa®Sow premix, which contains trace elements in organic form, was used at a rate of 750 mg / 1000 kg of feed that was provided to gilts as of 25 kg body weight until completion of their second lactation. The composition of sow milk, including dry matter, fat, protein, lactose, somatic cells and immunoglobulin A (IgA) contents, was determined in samples collected on day 7 of lactation over the first and second parities.

It was observed that this feeding strategy had no significant effect on the composition of sow milk.

Collaborators

Mark E. Wilson	Zinpro Corporation
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Fr�ed�eric Guay	Laval
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Milking a teat. Source: Sherbrooke Research and Development Centre, AAFC





Additional project information

Click on the links below for further
information on this project
Links were last updated in 2022

Additional Resources:

- Martineau, J.-P., Wilson, M., Bussi eres D., Farmer, C., Guay, F. (2017) [Partial substitution by organic trace minerals on gilt growth, production and longevity and progeny growth performance](#). Abstract from proceedings. *Advances in Pork Production (Banff Pork Seminar), Vol 28, Abstract 9*.

Retrieved from: <https://www.banffpork.ca/proceedings/search/>

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