Improving sow udder health at weaning
through complementary feed based on plant extracts

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Objective:

Dry-off is a very critical time for sows as it occurs almost at their peak of lactation. Moreover, milk production continues to rise in the context of hyper-prolificacy.
Our study objective was to evaluate the effect of an oral gel (including echinacea, parsley, sage and vitamin B6) on post-weaning udder status and reproductive performances.

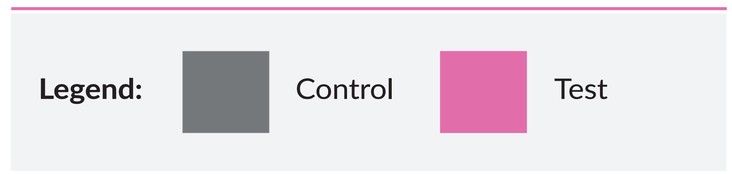
Material and methods:

102 sows were split into control and test groups:
- **Test group,** 15 ml of the gel was added on top of sow last meal before weaning.
- **Control group**, nothing was added.

Measurement:

- **Udder Engorgement (UE):** scoring from zero (flabby and flat) to three (swollen and hard).
- **Udder Skin Temperature (UST):** monitored via an infrared thermometer.
- **Milk Leakage (ML) rank:** from zero (no milk drops) to three (continuous leaking).
- **Weaning-to-Estrus Interval (WEI):** assessed with the heat standing behavior test.

Results



- **Lower UE score** in the test group.

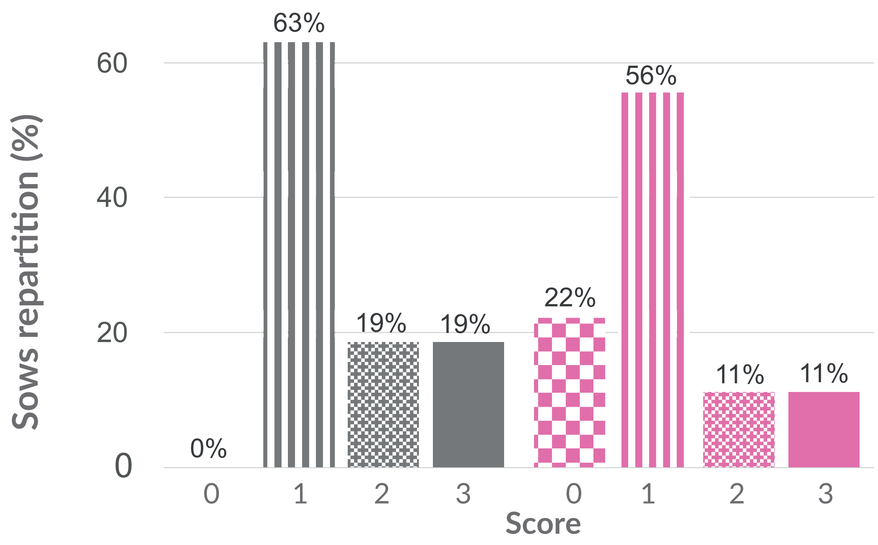


Fig. 1 UE score repartitions after weaning
(p <0.05, Fischer test)

- **Faster UST decrease** in the test group.

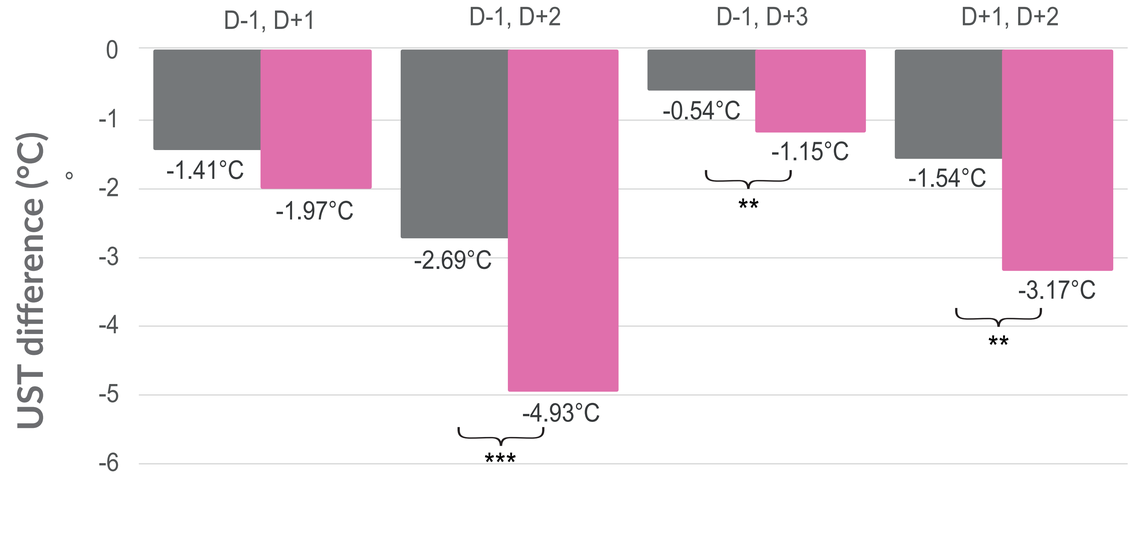


Fig. 2 Udder skin temperature difference from dry-off to 3 days after
(**p <0.05; ***p <0.005, Wilcoxon test)

- **Smaller sows proportion** with ML the day following weaning in the test group.

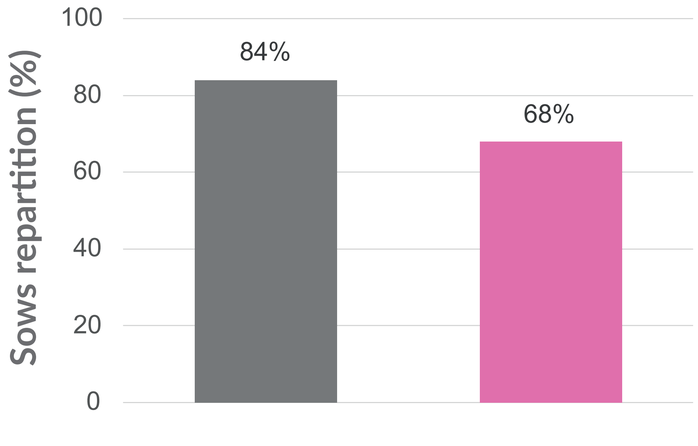


Fig. 3 Percentage of sows presenting milk leakage the day following weaning
(%, p<0.1, Fischer test)

- **Shorter WEI** in the test group (0.18 days shorter).
Proportion of sows with a WEI longer than four days tends to be higher in the control group.

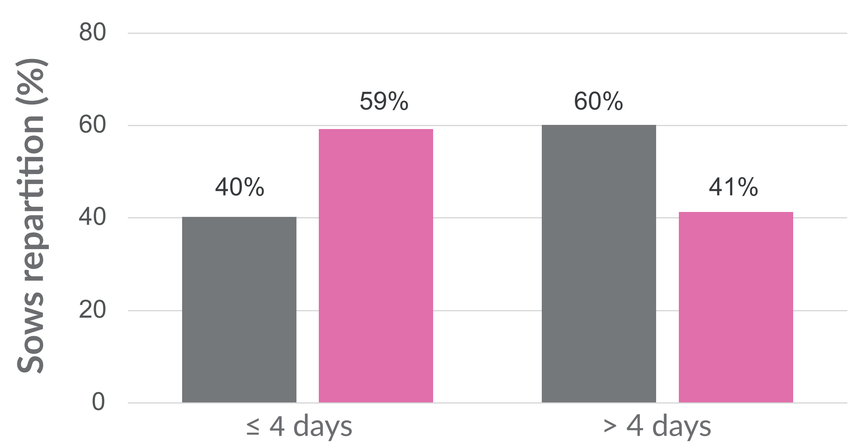


Fig. 4 WEI sow repartition
(%, p=0.1, Fischer test)

Conclusion

Our results showed that this nutraceutical gel reduces the udder temperature and engorgement, suggesting l**ess damages on udder**. These may ease udder involution **preserving udder health and performance**, observed via the **higher number of weaned piglets** per litter (+0.14) on the following lactation.

Nutraceuticals for Animal Care is an activity of group