

Management of a digestive challenge in newborn calves thanks to a nutraceutical

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Objective:

Evaluate the synergistic effect of formulation (including clay, wood charcoal & essential oils blend, named 'SafyGut Calf', SC) on the gut health status of young calves in farm with high risk of digestive challenge.

Material and methods:

40 calves were alternatively assigned to the control and the test group. Both groups received daily 10 ml of an oral gel twice a day, between the age of 2 days and 4 days (control group: placebo, test group: SC).

Measurement:

- Daily veterinarian treatments for digestive upset.
- At 6 and 13 days old: Feces consistency score and feces sampling to count *Cryptosporidium* oocysts.

Results

• During the first week of life, in the test group:

- Feces consistency tended to be improve (fig. 1).

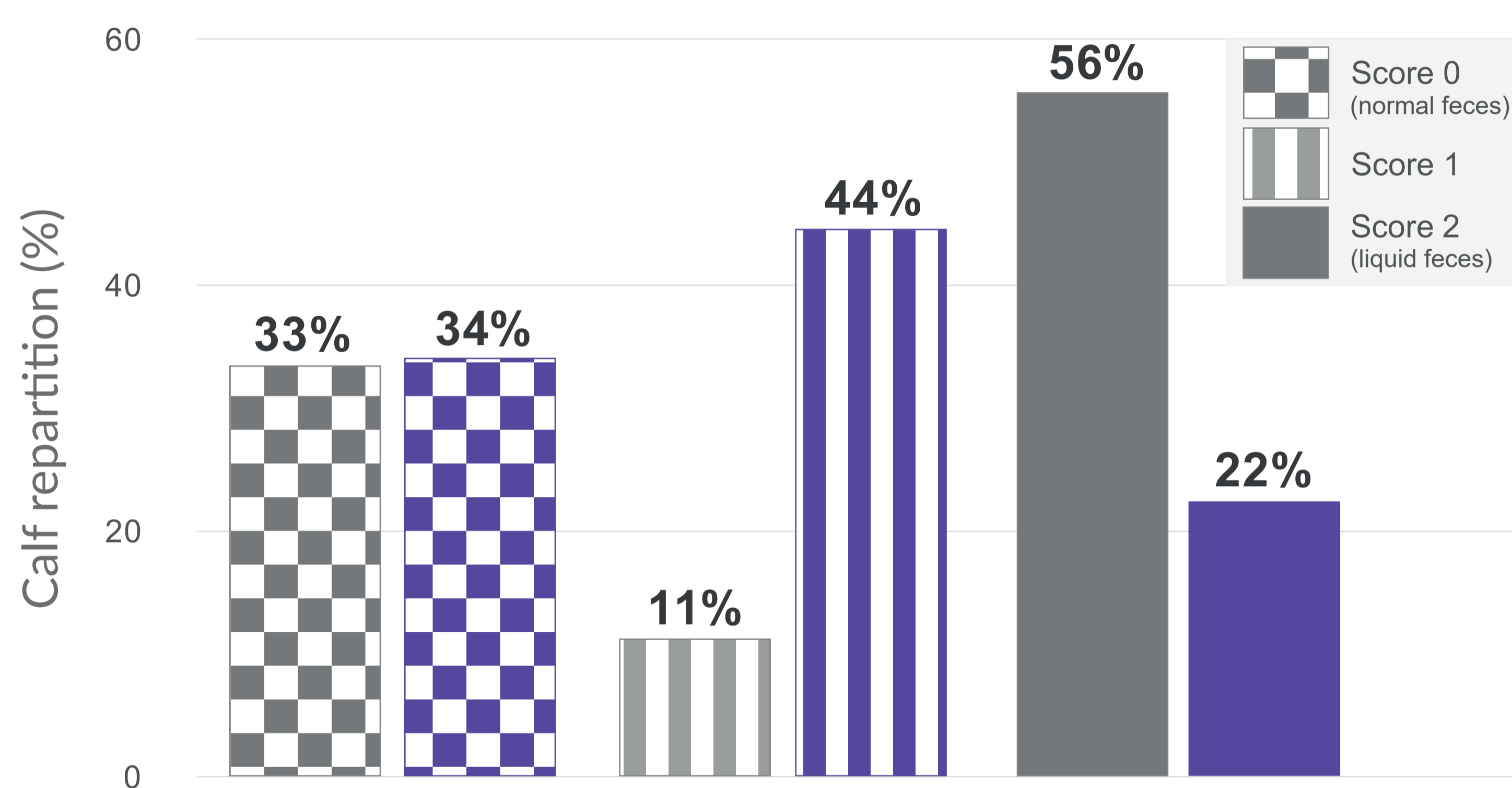


Fig. 1 Feces scoring at D6 (Khi² p-value = 0.10)

• During the second week of age, in the test group:

- Liquid feces severity score was lower by almost fivefold (fig. 2).
- Less calves were treated with medicine for digestive upset (fig. 3).
- Reduced veterinary treatment costs.

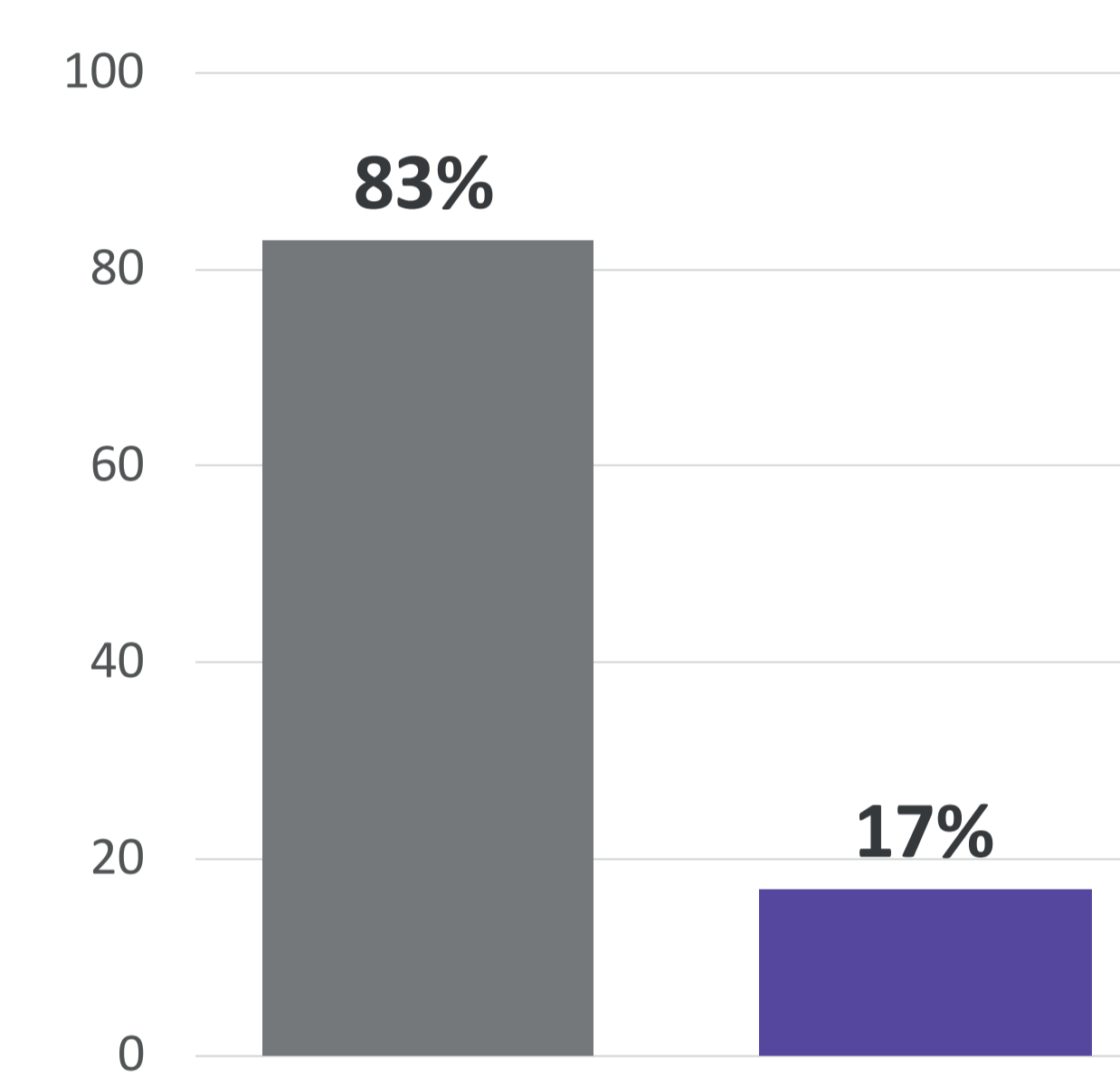


Fig. 2 Liquid feces frequency at D13 (% scores 2 and 3) (Khi² p-value < 0.1)

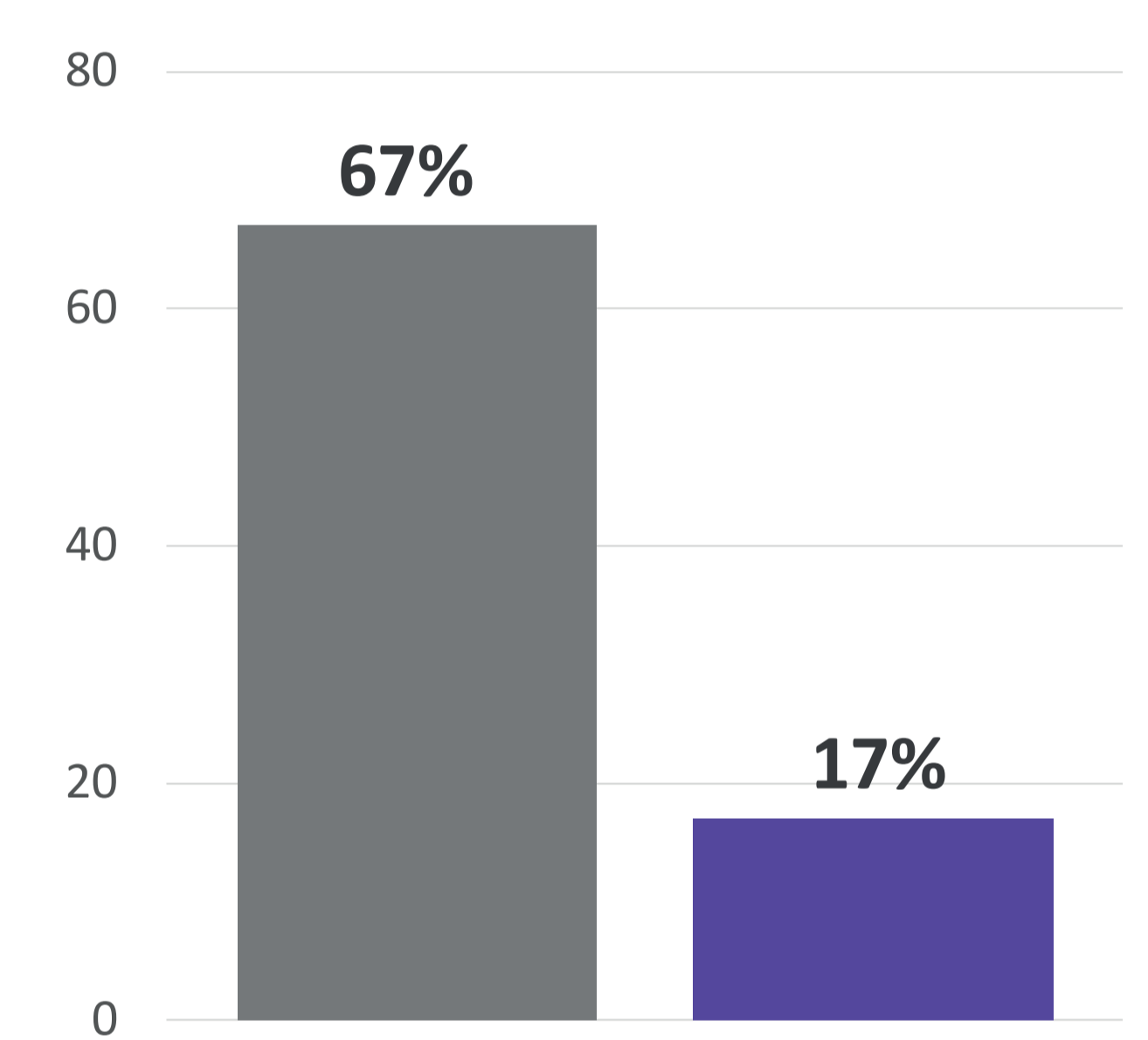


Fig. 3 Digestive upset veterinary treatments (%)

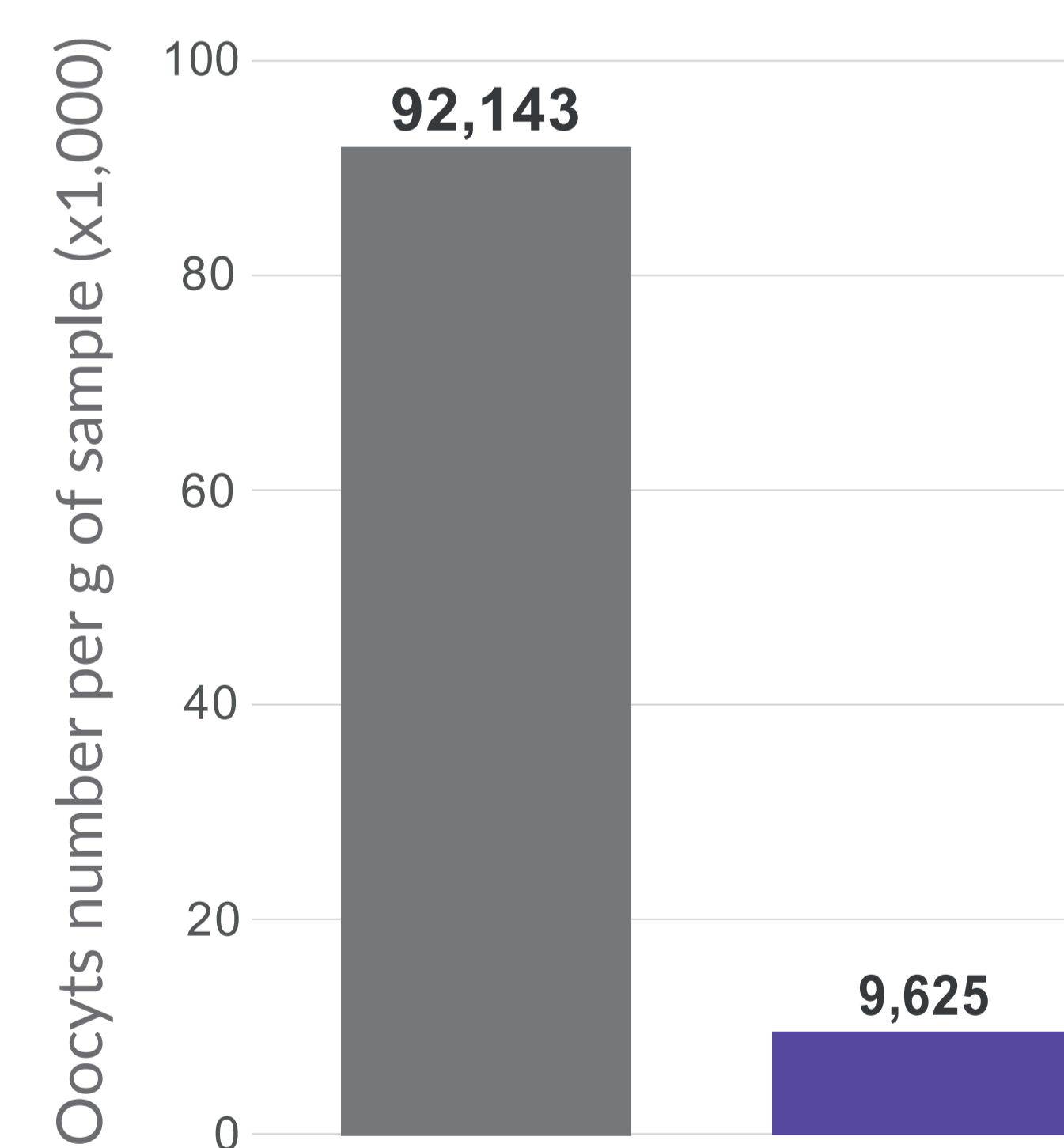
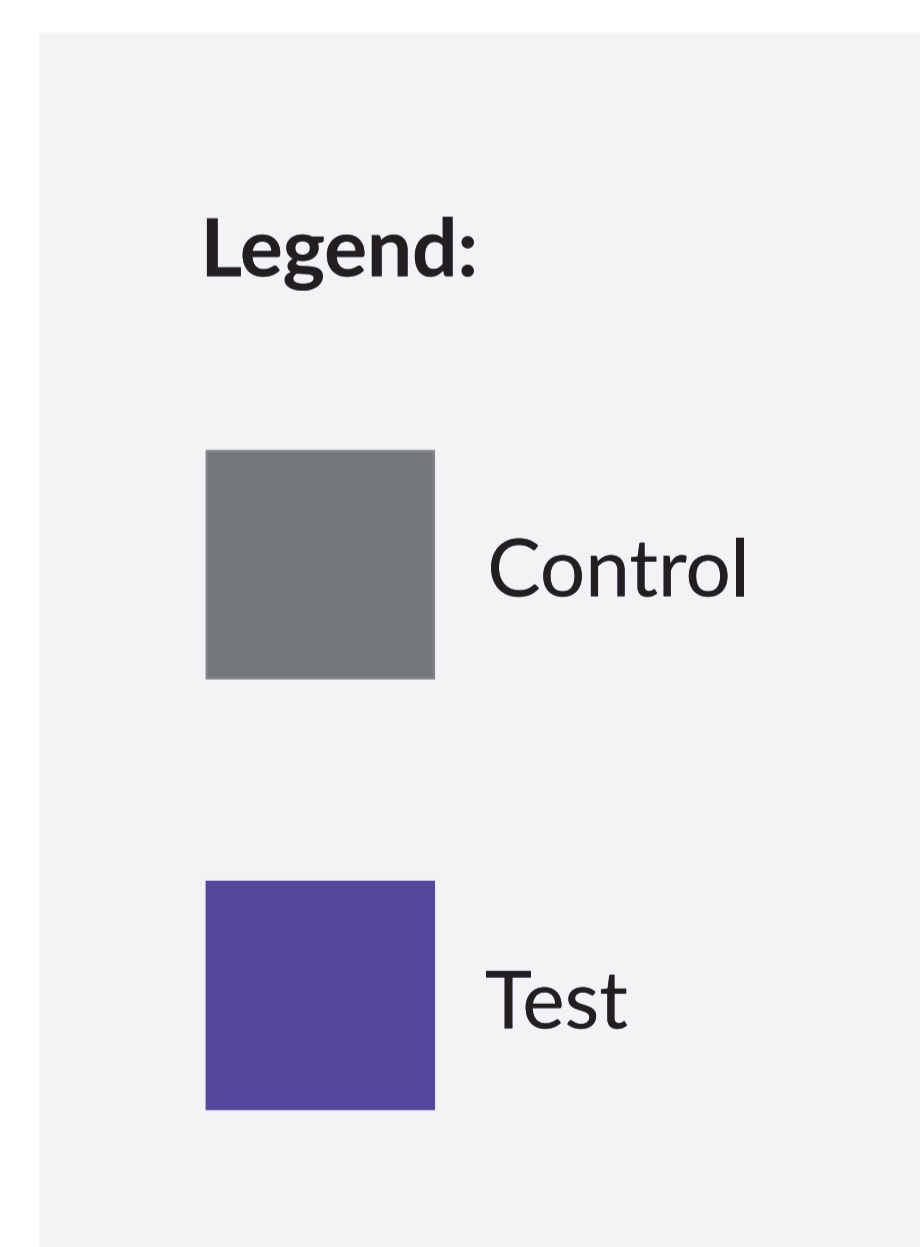


Fig. 4 Average oocysts number per gram of sample at D13 (Wilcox test p-value = 0.07)

- In both groups, the peak of *cryptosporidium* oocysts shedding occurs around 13 days of life.
- There is lower *Cryptosporidium* oocysts excretion in test group (fig. 4).
- Maximum excretion was 17,000 oocysts per g while maximum detection level (300,000 oocysts/g) was reached by 2 calves in the control group.

Conclusion

The synergistic effect of these ingredients reinforces the calf digestive tract. This complex can help to reduce the risk of cryptosporidiosis proliferation and its adverse effects on gut integrity.

