

EFFECT OF A MULTIFUNCTIONAL ADDITIVE ON THE MICROBIOTA, BEHAVIOR, AND GROWTH OF DAIRY CALVES RAISED IN GROUPS IN PASTURE-BASED SYSTEMS

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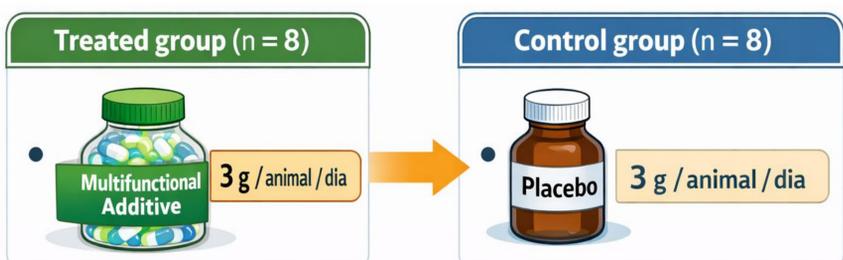
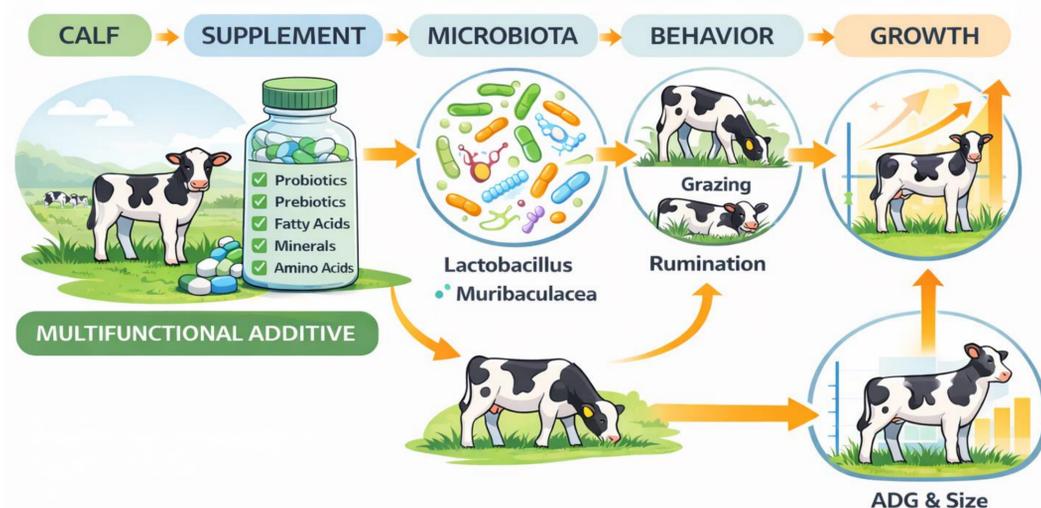
INTRODUCTION & AIM

Early-life nutrition can modulate gut microbiota, behavior, and growth of dairy calves, especially in pasture-based group systems. Multifunctional additives may support gut development and performance, but their effects under collective rearing conditions are still unclear.

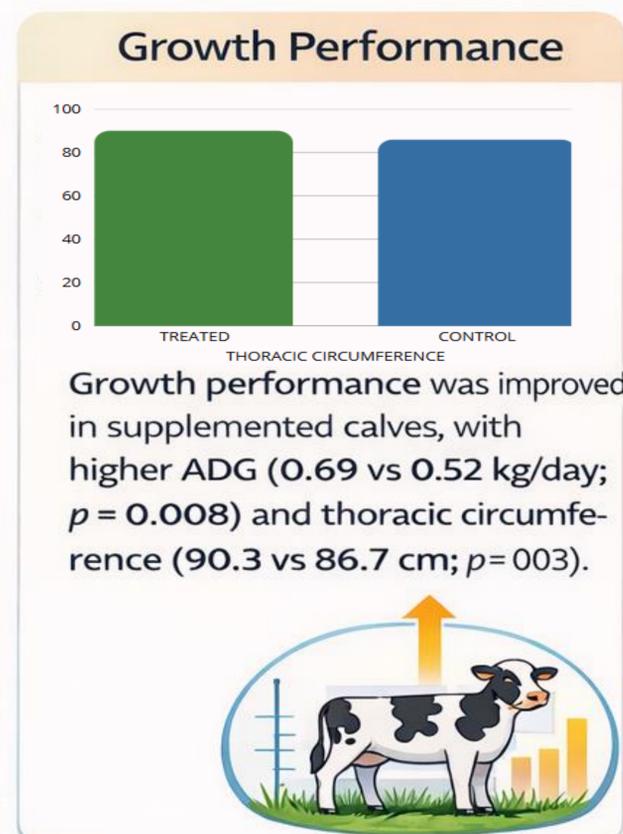
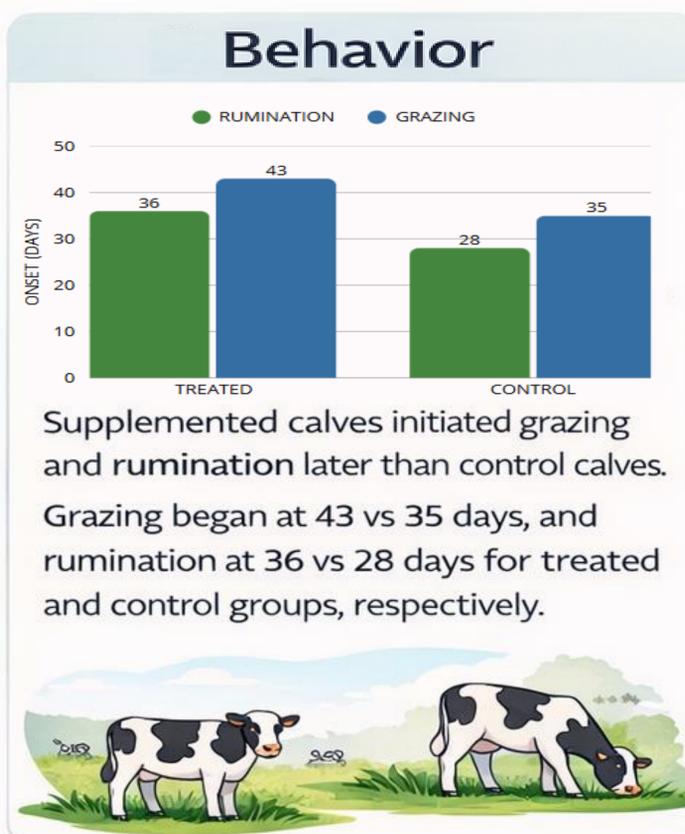
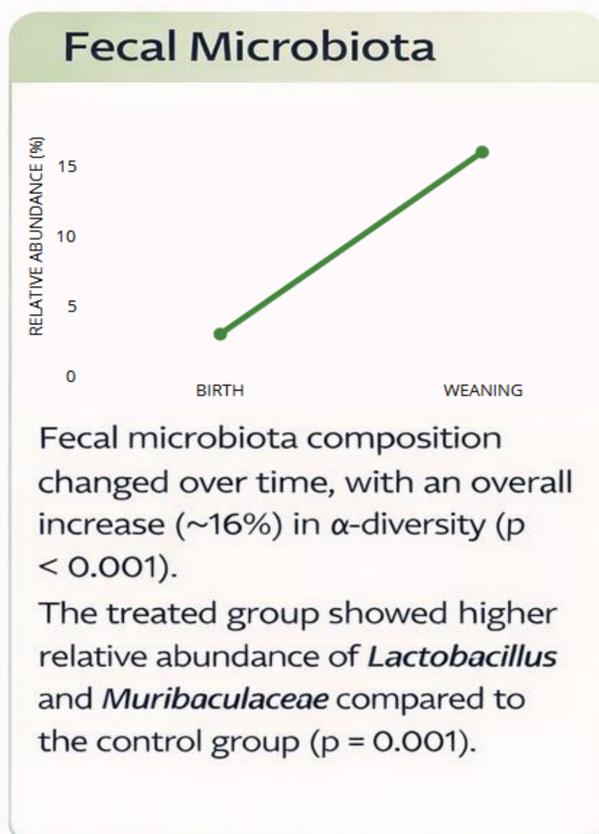
This study aimed to evaluate the effects of oral supplementation with a multifunctional additive on fecal microbiota, feeding behavior, and growth of group-raised dairy calves.

METHOD

- Embrapa Pecuária Sudeste (SP, Brazil)
- 16 Kiwi-Cross dairy calves (treated, n=8; control, n=8)
- Growth parameters (average daily gain – ADG; thoracic circumference – TC)
- Fecal microbiota were analyzed by 16S rRNA sequencing (Illumina MiSeq)
- Statistical analysis by Generalized Linear Models.



RESULTS & DISCUSSION



CONCLUSION

Fecal microbiota composition changed over time in dairy calves, likely due to natural rumen development. Although multifunctional additive supplementation delayed grazing and rumination behaviors, it enhanced growth performance, indicating a positive impact on early-life development in group-raised calves.

ACKNOWLEDGEMENT

