

KEY WORDS

- ✓ Calf
- ✓ Waste milk
- ✓ Gut
- ✓ Microbiota
- ✓ Performance

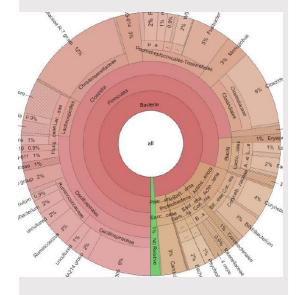
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THE EFFECT OF WASTE MILK FEEDING ON HOLSTEIN FEMALE CALVES GROWTH PERFORMANCE AND HEALTH STATUS

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THESIS ABSTRACT

The aim of this study was to investigate the effects of feeding waste milk containing antibiotic residues to calves in dairy cattle farms on growth performance, health parameters and intestinal microbiota (Bacterial diversity at species and phylum level) compared to calves feeding with milk without antibiotic residues.

Comparisons of feed consumption and feed conversion values and body measurements of the animals between groups were made using Independent Sample T-test. Intra-group comparisons of the data were made using the GLM procedure, full factorial analysis was selected as the model, and Tukey test was used as the post-test. No statistical difference was observed between the groups in daily dry matter consumption during the weaning period (P>0.05). No statistical difference was found between the groups in body measurements on the weaning day. No statistical difference was found between the groups in clinical, respiratory, and fecal scoring and fecal pH results during the weaning period (P>0.05). As a result of fecal microbiota analysis, Oscillospiraceae and Ruminococcus were found to be higher in the experimental group than in the control group. Enterobacter, Escherichia-Shigella and Salmonella in the pathogenic microorganism group were detected proportionally less in the experimental group.

APPLICATION AREAS OF THE THESIS RESULTS

Antibiotics are used extensively in dairy farms to treat mastitis, reproductive system diseases and foot diseases. Waste milk is used in feeding calves for economic reasons. The thesis study emphasizes the effect of using economically valuable antibiotic milk in feeding calves on animal health and antimicrobial resistance.

ACADEMIC ACTIVITIES

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