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Effect of probiotic (re3) supplement on growth performance, diarrhea incidence and blood parameters of n'dama calves

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A sixteen week trial was conducted at the Research Farm (Technology Village) of the Department of Animal Science, School of Agriculture, University of Cape Coast, Cape Coast, Ghana. This study sought to investigate the effects of Probiotic (RE3) products on growth performance, diarrhea incidence and blood parameters of N'dama calves. Sixteen N'dama calves of an average initial weight of 44.2 kg were randomly assigned to one of four dietary treatments according to their body weight, age and sex [T1- Control (No RE3 supplementation), T2- 0.03 ml RE3 per kg body weight, T3- 0.06 ml RE3 per kg body weight and T4- 0.09 ml RE3 per kg body weight] in a Completely Randomize Design (CRD) and there were 3 replicates per treatment. The calves were allowed access to feed and water ad libitum. The body weight of the calves was recorded with a weighing balance at the start of the experiment and thereafter regularly at two weeks interval. Weighing was done early morning before the calves are allowed to access feed and water and were also observed in their pens for occurrence of diarrhea and faecal scores recorded. Blood samples were obtained from each calf at the end of the study through jugular vein puncture. Supplementation of RE3 to calves had showed a beneficial effect by reducing the incidence of diarrhea. The highest faecal score was recorded in T1 and the least faecal score was recorded in T3. There were significant difference in the faecal score between the treatment group and the control after two weeks of the experiment ($P<0.05$). There was no significant difference in the average daily gain of the animals ($P>0.05$). Hematological and biochemical indices of calves were all within the normal range except in treatments (1, 3 and 4) which recorded high WBC count with no significant difference ($P>0.05$).