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## Effects of dietary phytase supplementation on water intake and digesta moisture contents of broiler chicken

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Beneficial effects of exogenous microbial phytase on the utilization efficiency of dietary phytate phosphorus, other minerals, protein and energy, and mineral excretion are well known. Objective of the present study was to determine the effects of dietary phytase supplementation on water intake and ileal digesta moisture contents of broiler chicks. Twenty one day old broiler chicks (n=50) were randomly allocated into 10 cages. Cages were assigned into two experimental diets. From day 21-40 birds were fed one of two diets; 1) diet with 0 FTU of microbial phytase or 2) a diet with 1000 FTU of microbial phytase/kg. Both diets met the recommended nutrient levels and were in mash form. Each cage had a drinker and a feeder. Daily water and feed intakes were measured from day 34-40. Moisture contents of the ileal digesta samples collected from five randomly selected birds from each treatment were determined. The daily feed intake of the broilers given no dietary phytase (146±2.6) was significantly ($p<0.001$) increased to 155±1.8 when diet was supplemented with microbial phytase. Daily water intake of the birds given diets with phytase was also significantly higher ($p<0.001$) than those birds given no dietary phytase (294±4 vs. 330±10ml/day). Daily water: feed ratio of the birds given diets with phytase was also significantly higher ($p<0.05$) than that of birds given no dietary phytase (2.0±0.04 vs. 2.22±0.04±). Moisture content of the ileal digesta of the birds given phytase supplemented diet (42.7±6.6) was significantly ($p<0.001$) higher than that of broilers given no dietary phytase (26.7±5.7) It was concluded that supplementation of broiler diets with microbial phytase increased the water intake and moisture content of the ileal digesta.

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