

Feed intake, antioxidant properties and litter performance affected by multi-nutrient block additive of rabbit does during prevailing heat stress in Egypt.

ABSTRACT

A total number of 48 New Zealand White rabbit does (6-7 months old; 3068.33 ± 29.56 g) were randomly assigned into two groups (24 rabbits in each group of treatments). The 1st group was received a concentrated diet and the 2nd group received on a concentrated diet supplied with multi-nutrient block (MNB). The length of the experiment persisted for 16 weeks. The MNB group had significantly lower feed intake during pregnancy and lactation when compared to the fed concentrated diet only. As well as, data on plasma antioxidant, constituents followed the same trends as in these concerning pregnancy periods, where MNB plus concentrated diet group surpassed the concentrated diet group and favored the parameters evaluated. Also, during pregnancy constantly plasma antioxidant capacity and endogenous antioxidant enzymes in terms of glutathione peroxidase and superoxide dismutase were significantly higher in the MNB group compared to the concentrated diet group. Litter size and weight at both birth and weaning, total litter weight gain and pre-weaning survival rate% significantly improved for MNB plus concentrated diet compared to the control cluster. It concluded that MNB in rabbit cages with feed concentration improved feed intake during pregnancy and lactation period also enhanced antioxidant status during pregnancy period additionally, better litter performance. Also, the best results were obtained from supplementing MNB on the first day from the mating.

Keywords: Multi-nutrient block, Feed intake, antioxidants, litter performance, rabbit does.