Veterinary Parasitology, 40 (1991) 207-216
Elsevier Science Publishers B. Y., Amsterdam

The effect of *Trypanosoma brucei* infection on serum biochemical parameters in boars on different planes of dietary energy

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Abstract

Young boars were placed on diets with either low or high dietary energy and subsequently infected with a virulent stock of *Trypanosoma brucei.* The effects of dietary energy level and infection on some serum biochemical parameters were evaluated up to 7 weeks post-infection (p.i.). There were no significant changes in serum electrolyte (Na +, K +) concentrations resulting from dietary energy level and/or the infection. Serum total protein and albumin levels significantly decreased in both groups of infected boars, the decline being greater in those on the low-energy diet. Infection was accompanied by a rise in serum transaminase (serum aspartate and alanine aminotransferases) levels which were higher in infected boars on the low-energy diet. The serum testosterone concentration declined in both groups of infected boars with the fall being more pronounced in the group on the low-energy diet. The results indicated that the reproductive efficiency of boars may be modulated by nutrition and that adequate feeding may assist in ameliorating the deleterious effects of trypanosomiasis on production in endemic areas.