Effects of ripe papaya (C arica papaya) seed powder on the seminiferous epithelium of the boar testis

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Abstract

The effect of oral administration of ripe Carica Papaya seed powder on testicular histology of Sus scrofa domestica boars has been addressed in the present article. Fifteen pubertal Large White boars were randomly selected and divided into two groups. Each boar in the experimental group received a daily dose of 300mg C Papaya mixed with 0.5 kg of conventional pig feed while the control group received a placebo. The experiment was carried out for 56 days in the University of Nairobi. After every two weeks, one boar from the control group and two from the experimental group were castrated and testicular tissue samples processed for histology. At the end of 56 days the remaining entire boars were maintained for 14 days and 60 days respectively without the papaya powder to assess reversibility. The test material had no effect on haematological parameters. However, histopathological changes of the seminiferous epithelium which appeared to be dependent upon duration of C Papaya consumption was noticed, these changes were reversible. Although the mechanism(s) for the effect of papaya seed extract is not explained by this study, it is observed that papaya seed powder causes gradual disorganization, exfoliation and loss of spermatocytes and spermatids.