The Effect of Starvation on Scrotal Circumference and Morphology of Spermatozoa of West African Dwarf Goat Buck.

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Abstract

This study was carried out to determine the effect of starvation on scrotal circumference and morphology of spermatozoa of WAD bucks. Twelve healthy sexually mature WAD bucks were used for this study. The animals were starved for 24, 48 and 72 hours and semen samples were collected after each stage of starvation.

It was observed that as the length of starvation increased sperm abnormalities increased and volume of semen decreased. There was no semen production after 72 hours of starvation from any of the bucks.

Secondary types of abnormalities were the common types of abnormalities observed during this study. Their values increased from 7.06% at control to 80.39% and 85.43% at 24 hours and 48 hours of starvation respectively.

Scrotal circumference decreased from 15.75±0.25cm at control to 14.88±0.09cm, 12.95±0.38cm and 12.35±0.40cm at 24 hours, 48 hours and 72 hours of starvation, respectively, due to degeneration caused by starvation. It can be concluded that starvation has adverse effect on the reproductive performances of bucks to be used for breeding programme. Bucks should therefore be well fed before being used for breeding.

Keywords: Acrosome, breeding, morphology, spermatozoa, starvation