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## Influence of water deprivation on intake and growth performance of Nguni goats

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The objective of the study was to determine the influence of varying levels of water deprivation on intake and growth performance of Nguni goats. A total of 36 Nguni goats (initial weight  $18 \pm 3.2$  kg) were used in the study. The goats were housed in individual cages and subjected to varying periods of water deprivation (0 h; 24 h; 48 h), with ad libitum access to *Medicago sativa* hay. Average Daily Water Intake (ADWI), Average Daily Feed Intake (ADFI), Water to Feed Ratio (WFR), Average Daily Gain (ADG) and Feed Conversion Ratio (FCR) were determined weekly. Average Daily Water Intake (ADWI) was largest from goats deprived of water for 48 h compared to those deprived of water for 24 h and 0 h ( $p < 0.05$ ). Average Daily Feed Intake (ADFI) was largest for goats deprived of water for 48 h compared to those deprived of water for 24 h and 0 h in week 1 and week 4 of the feeding period ( $p < 0.01$ ). In week 2 and 3 of the feeding period, ADFI was smallest for goats deprived of water for 0 h compared to those deprived of water for 24 h and 48 h ( $p < 0.01$ ). The ADG and FCR declined as the level of water deprivation was increased ( $p < 0.01$ ). It was concluded that water deprivation increased water and feed intake, whereas average daily gain and feed conversion declined as the water deprivation period was increased, thereby impacting on the productivity of Nguni goats.

### Biography

C T Mpendulo is currently pursuing PhD in Animal Science at the University of KwaZulu-Natal. He has published some of my findings from my Master's degree thesis, and has attended local and international conferences held by the South African Society for Animal Science and the American Society for Animal Sciences, respectively.

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