

## THE EFFECTS OF NUTRITIONAL FLUSHING ON THE PRE-MATING METABOLIC AND ENDOCRINE PROFILES OF DOES

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### ABSTRACT

As part of a 2x2 factorial (factors: supplementation level and age) flushing experiment to determine the physiologic link between nutrition and reproduction in 3 - 6 year old West African Dwarf goats, the metabolic and pituitary functioning status of the does were determined. The parameters measured were: blood glucose, total protein, calcium, insulin, and luteinizing hormone (LH) at mating. Generally, the interaction of high supplementation and younger (3 - 4 year) tended to be associated with low serum concentration of glucose and high serum levels of total protein, while the combination of low supplementation level and younger age (3 - 4 year) showed higher serum concentration of insulin and LH. It was concluded that flushing induced pre-breeding metabolic and pituitary functioning status in does, characterized by the tendency for low serum concentration of glucose, but high levels of total protein, insulin and LH in the 3 - 4 year does.