

Energetic parameters in pregnant and lactating Brandt's voles fed high- or low-fibre diets

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The effect of diet quality (high-fibre (HF) or low-fibre (LF)) on energetic parameters in pregnant and lactating Brandt's voles (*Lasiopodomys brandtii*) was examined. There was no significant difference ($p > 0.05$) in body mass of voles prior to dietary acclimatization and during pregnancy. Energetic parameters (dry matter, gross energy, digestible energy intake and digestibility) as well as body mass of pups was not significantly ($p > 0.05$) affected by diet quality. Low fibre diet caused a decrease ($p < 0.05$) in feed and gross energy intake and an increase ($p < 0.001$) in digestible energy intake at mid lactation while digestibility was significantly higher at early lactation. Liver and kidney were significantly ($p < 0.05$) lighter in voles on low fibre diet. No significant difference was detected between diets for metabolic rate. These results revealed that Brandt's voles can compensate for poor quality (HF) diet physiologically by increasing food intake and decreasing digestible energy intake and digestibility to keep reproductive performance unaffected. The most energetically demanding period of breeding cycle of Brandt's vole is mid lactation.

Biography

Olajumoke Olusola Adewumi completed her PhD at the age of 38 years from the Federal University of Technology, Akure, Nigeria and postdoctoral studies from the State Key Laboratory of Integrated Management of Pest Insects and Rodents, Institute of Zoology, Chinese Academy of Sciences, Beijing, China. She is currently a Senior Lecturer at the Federal University of Agriculture, Abeokuta, Nigeria. She has authored and co-authored more than 25 papers including journal publications and conference proceedings and serving as a reviewer for the journals of repute. Olajumoke Adewumi is a member of several academic and administrative committees and has served in various capacities.