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## **Effect of lactation stage on body condition in rabbits**

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The purpose of this study was to evaluate the effect of the lactation stage on body condition at 2<sup>nd</sup> mating, delivery and 10<sup>th</sup> day of lactation. Body condition was measured as body weight (BW) and the Perirenal Fat Thickness (PFT) at 2<sup>nd</sup> mating, delivery and 10<sup>th</sup> day of lactation. The Non-Esterified Fatty Acid (NEFA) was also measured before and after stimulation with isoproterenol (NEFAB and NEFAR). All analyses were performed using Bayesian methodology. The model included the effects of lactation-physiological status (lactating and non-lactating females at 2<sup>nd</sup> mating, delivery and 10<sup>th</sup> day of lactation), line status (High and Low lines selected for residual variance of litter size), season and an effect of female. The BW and PFT were not affected by lactation stage at 2<sup>nd</sup> mating. However, lactating females showed lower BW and PFT than non-lactating females at delivery and 10<sup>th</sup> day of lactation. The NEFAB increased by 19% and 27% in lactating and non-lactation females between mating and delivery and it decreased by -22% and -17% until 10<sup>th</sup> day of lactation. From mating to delivery, NEFAR increased slightly by 5% in lactating females, while non-lactating females increased by 17%. From delivery to 10<sup>th</sup> day of lactation, NEFAR decreased by -15% and -28% in lactating and non-lactating females. In conclusion, lactating status affected body weight and body fat mobilization in female rabbit at delivery and 10<sup>th</sup> day of lactation.

### **Biography**

Eddy Wilfredo Calle studied Agriculture Engineering and obtained his MSc from Technical University of Oruro. He is an Assistant Professor of Experimental Design in Technical University of Oruro, Bolivia. Currently, he is a PhD student at University Polytechnic of Valencia with a Erasmus Mundus Fellowship (Babel Project) until July 2016. He actively collaborates with the division of Animal Production at University Miguel Hernández. The main topic of his research is rabbit breeding.

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