

2<sup>nd</sup> International Conference on

# Livestock Nutrition

July 21-22, 2016 Brisbane, Australia

## Effects of different dietary energy and protein levels at fixed slaughter weight on performance and carcass characteristics of Arabi fattening lambs

**Najafgholi Dabiri**

Islamic Azad University, Iran

Forty eight Arabi fattening ram lambs with similar initial weight ( $18.72 \pm 0.604$  Kg) and age ( $90 \pm 5$  days) from a flock of Arabi sheep of Ramin Agricultural and Natural Resources University were randomly allocated to six dietary treatments in a  $2 \times 3$  factorial experiment using completely randomized design. The treatments included low (EL=2.4 Mcal/KgDM ME), medium (EM=2.6 Mcal/KgDM ME) and high (EH=2.8 Mcal/KgDM ME) levels of dietary energy in combination with low (PL=16% cp) and high (PH=18% cp) levels of dietary protein. The body weight (BW), average daily gain (ADG), average daily feed (ADF) and feed conversion ratio (FCR) of lambs were measured two weeks interval until the end of experiment. Carcass components were recorded at the end of trial. The ADG of lambs in EH, EM and EL treatments were respectively 271, 244 and 206 g/d and differences between them were significant ( $p < 0.05$ ). The same trend was found for feed efficiency. The ADG was also significantly greater ( $p < 0.05$ ) for lambs fed diets containing 18% protein than for lambs fed diets containing 16% protein (254 vs. 216 g/d). The FCR also had the same trend (4/47 vs. 5/37). The differences for other traits for dietary containing different Energy and Protein levels were not significant. The interactions between protein and energy treatment levels were not significant for none of traits. In general, with increasing level of energy the performance of lambs particularly for ADG and FCR was improved for either of protein levels. The lowest ADG (150 g/d) and worst FCR (6/36) was belong to the treatment containing the lowest energy and protein levels and differences between them and other treatments were significant ( $p < 0.05$ ).

### Biography

Najafgholi Dabiri has completed his PhD from Massey University, New Zealand in 1994 and had a sabbatical leave in Cornell University in 2000. He has published more than 50 papers in Persian and English journals and has been serving as an Editorial Board Member of Journal of Agriculture. He had several administration activities in Chamran and Ramin Agricultural and Natural Resources Universities and is currently a Professor of Animal Science in Islamic Azad University, Karaj Branch.

[Najdabiri@hotmail.com](mailto:Najdabiri@hotmail.com)

### Notes: