

10th World Congress on

VETERINARY & ANIMAL SCIENCE

May 18-19, 2018 Osaka, Japan

The effects of nutrient intake level on blood metabolism in Korean native Hanwoo cows

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This study was conducted to investigate the effects of nutrient intake level on blood metabolism related to reproduction efficiency in Korean native Hanwoo cows. 30 cows were assigned to one of two dietary groups; CON (concentrates-3.6 kg and rice straw-3 kg) and TMR (TMR-6.6 kg). The dry matter intake is higher in CON (6.05 kg) than in TMR (5.83 kg). While the protein and TDN intake was higher in TMR than in CON. The blood NEFA concentration of TMR and CON was 219.93 uEq/L and 119.53 uEq/L, respectively and blood glucose concentration of CON was increased by 36% compared to TMR. Meanwhile, the BUN was significantly higher ($p < 0.0001$) in TMR (20.45 mg/dl) than in CON (14.49 mg/dl). The blood concentration of AST and GGT was higher in CON than in TMR. The results of the above study showed that when the TMR was fed, the NEFA concentration was significantly increased and the glucose and BUN were decreased than those of concentrate feeding. These differences of the blood metabolites concentration were caused in the levels of nutrient intake. Since the blood metabolites are known to be related to reproduction efficiency, therefore, the feed type and nutrient intake level that can affect blood metabolites are important for productivity in Hanwoo cows.

Biography

Min-ji Kim has completed her Bachelor's degree from Kangwon National University, South Korea and presently she is a Master's degree student at College of Animal Life Science, Kangwon National University.

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