

## Accepted Manuscript

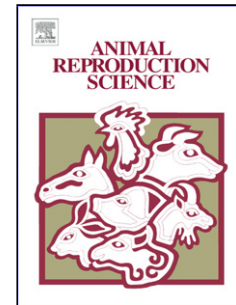
Title: Associations between serum calcium concentration and postpartum health and reproductive performance in dairy cows

Authors: Jae Kwan Jeong, Hyun Gu Kang, Ill Hwa Kim

PII: S0378-4320(18)30602-X

DOI: <https://doi.org/10.1016/j.anireprosci.2018.08.006>

Reference: ANIREP 5908



To appear in: *Animal Reproduction Science*

Received date: 17-6-2018

Revised date: 20-7-2018

Accepted date: 7-8-2018

Please cite this article as: Jeong JK, Kang HG, Kim IH, Associations between serum calcium concentration and postpartum health and reproductive performance in dairy cows, *Animal Reproduction Science* (2018), <https://doi.org/10.1016/j.anireprosci.2018.08.006>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Associations between serum calcium concentration and postpartum health and reproductive performance in dairy cows

**Jae Kwan Jeong, Hyun Gu Kang, Ill Hwa Kim\***

*College of Veterinary Medicine, Chungbuk National University, Cheongju, Chungbuk, 28644, South Korea*

\*Corresponding author: I.H. Kim, Tel.: +82 43 2612571; Fax: +82 43 2673150.

*E-mail address: illhwa@cbu.ac.kr (I.H. Kim)*

### Highlights

- Serum calcium after calving correlates with health and resumption of cyclicity.
- High calcium is associated with fewer retained placentas and clinical endometritis.
- High calcium is also associated with earlier resumption of postpartum cyclicity.
- High calcium is associated with high concentrations of TCH, albumin and glucose.

### ABSTRACT

In the present study, the aim was to evaluate the associations between serum calcium concentration after calving and serum metabolites, postpartum disorders, and reproductive performance in dairy cows. Blood samples were collected from 200 Holstein cows immediately and 1, 2, 4, 6, and 8 weeks after calving to measure serum metabolites and progesterone concentrations. Cows were divided into three groups on the basis of the mean serum calcium concentration after calving: a Low group ( $<7.9$  mg/dL,  $n = 52$ ), a Moderate group ( $7.9$ – $9.6$  mg/dL,  $n = 100$ ), and a High group ( $\geq 9.7$  mg/dL,  $n = 48$ ). Total cholesterol

Download English Version:

<https://daneshyari.com/en/article/8949586>

Download Persian Version:

<https://daneshyari.com/article/8949586>

[Daneshyari.com](https://daneshyari.com)