Title: Lipopolysaccharide exposure modifies salivary and circulating level of cortisol in goats

Authors: S.P. Singh, R. Natesan, N. Sharma, M.K. Singh, A. Rahal

PII: S0921-4488(18)30080-4
DOI: https://doi.org/10.1016/j.smallrumres.2018.02.010
Reference: RUMIN 5641

To appear in: *Small Ruminant Research*

Received date: 4-9-2017
Revised date: 16-2-2018
Accepted date: 17-2-2018

Please cite this article as: Singh, S.P., Natesan, R., Sharma, N., Singh, M.K., Rahal, A., Lipopolysaccharide exposure modifies salivary and circulating level of cortisol in goats.Small Ruminant Research https://doi.org/10.1016/j.smallrumres.2018.02.010

Short communication

Lipopolysaccharide exposure modifies salivary and circulating level of cortisol in goats

S. P. Singh [a,*], R. Natesan [a], N. Sharma [a], M. K. Singh [b], A. Rahal [c]

[a] *Animal Physiology and Reproduction Division, ICAR-Central Institute for Research on Goats, Makhdoom, Farah, Mathura, U.P., India*

[b] *Goat Genetics and Breeding Division, ICAR-Central Institute for Research on Goats, Makhdoom, Farah, Mathura, U.P., India*

[c] *Goat Health Division, ICAR-Central Institute for Research on Goats, Makhdoom, Farah, Mathura, U.P., India*

[*] **Corresponding author**

Dr. S. P. Singh, Scientist

Animal Physiology and Reproduction Division

ICAR-Central Institute for Research on Goats

Makhdoom, Farah - 281 122, Mathura (U.P.)

Phone : +91 9412826670; Fax : +91 5652763246

E-mail: shiva.singh@icar.gov.in, spsinghmail1@gmail.com

HIGHLIGHTS

- Suitability of saliva cortisol as a biomarker of LPS responses in goats is proposed.
- Salivary and blood cortisol level follow similar change after LPS exposure in goat.
- Cortisol level in blood and saliva of goats are significantly correlated.
- Time dependent changes in cardinal physiological variables after LPS infusion.