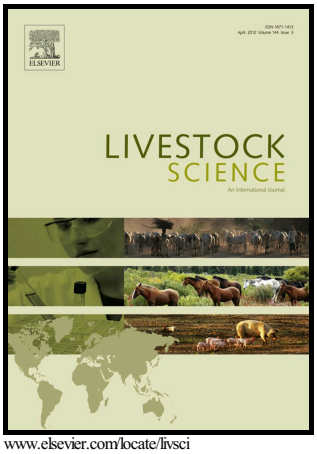


www.elsevier.com/locate/livsci

# Effect of yeast supplementation on digestibility, fecal microbiota and serum endotoxin levels in non-exercising and exercising horses.

A.A.O. Gobesso, G.V. Pombo, R.L. Costa, Y.S. Pereira, K. Feltre

PII: S1871-1413(17)30324-4
DOI: https://doi.org/10.1016/j.livsci.2017.10.023
Reference: LIVSCI3335

To appear in: *Livestock Science*

Received date: 28 October 2016
Revised date: 19 October 2017
Accepted date: 27 October 2017

Cite this article as: A.A.O. Gobesso, G.V. Pombo, R.L. Costa, Y.S. Pereira and K. Feltre, Effect of yeast supplementation on digestibility, fecal microbiota and serum endotoxin levels in non-exercising and exercising horses., *Livestock Science,* https://doi.org/10.1016/j.livsci.2017.10.023

# Effect of yeast supplementation on digestibility, fecal microbiota and serum endotoxin levels in non-exercising and exercising horses.

A.A.O. Gobesso*, G.V. Pombo*, R.L. Costa, Y.S. Pereira, K. Feltre

Departamento de Nutrição e Produção Animal da Faculdade de Medicina Veterinária e Zootecnia, Universidade de São Paulo - USP, Av. Duque de Caxias Norte, 225, 13635-900, Pirassununga, São Paulo, Brazil.

cateto@usp.br (Alexandre Gobesso)
gpombo@usp.br (Gabriela Pombo)
*Correspondence to:* Departamento de Nutrição e Produção Animal da Faculdade de Medicina Veterinária e Zootecnia, Universidade de São Paulo - USP, Av. Duque de Caxias Norte, 225, 13635-900, Pirassununga, São Paulo, Brazil. Tel: +55 19 3565-4300, Fax: +55 19 3565-4295.



## Abstract

The aim of this study was to evaluate the effect dietary supplementation of live yeast Saccharomyces cervisiae NCYC 996 (SC) on digestibility, fecal microbiota and volatile fatty acids (VFA) and serum endotoxin levels in non-exercising and exercising horses. Ten Arabian geldings were used in a 2 x 2 factorial design [10 horses, 2 treatments (with and without SC) and 2 periods (with and without exercise. The SC culture (7.5 g/meal; 1.5 x 1010 cfu/g) was given as a top-dressing. There was no effect of yeast supplementation on digestibility. Fecal yeast and bacterial counts, VFA and serum endotoxin levels were unaffected by yeast supplementation and exercise.

**Keywords:** digestion**,** equine, faecal, probiotics