



[PDF (246K)] [References]

The Journal of Poultry Science Japan Poultry Science Association Available Issues Instructions to Authors **Publisher Site** Japanese Page Author: ADVANCED Volume Go Keyword: Search **TOP > Available Issues > Table of Contents > Abstract** ONLINE ISSN: 1349-0486 PRINT ISSN: 1346-7395 The Journal of Poultry Science Vol. 46 (2009), No. 1 pp.19-24

Influence of Caecectomy on Digestibility of Amino Acids for Soybean, Canola and Sunflower Meals in Adult Cockerels

Ali Nouri-Emamzadeh¹⁾ and Akbar Yaghobfar²⁾

- 1) Department of Animal Science, Faculty of Agriculture, Islamic Azad University, Iran
- 2) Animal Science Research Institute, Iran

(Received: September 5, 2008) (Accepted for publication: November 6, 2008)

The experiment was conducted to determine influence of caecectomy on digestibility quantities of amino acids for soybean (SBM), canola (CM), sunflower (SFM) meals in adult Rhode Island Red (RIR) cockerels with using conventional addition method (CAM) for 7 d: a 4-d adaptation and a 3-d experiment period on the basis of a completely randomized design with 4 replicates. In assayed meals, caecectomy decreased (P<0.05) apparent digestibility quantities of amino acids, except for tyrosine, methionine and leucine for CM and arginine and valine for SFM in adult cockerels. The most decrement of apparent digestibility quantity was for phenylalanine (8.9% decrement) in SBM and for cysteine (14.5% and 22.7% decrement, respectively) in CM and SFM. Differences between intact and caecectomised cockerels were (P<0.05) significant for true digestibility quantities of amino acids, except for threonine in SBM, serine and valine in CM and histidine, arginine, threonine and valine in SFM. The most difference in true digestibility quantity was for phenylalanine (11.8%) in SBM and for cysteine (12.8 and 18%, respectively) in CM and SFM. However, caecectomy decreased mean apparent and true digestibility of total amino acid in SBM (3.8 and 3.1%, respectively), CM (3.1 and 3.0%, respectively) and SFM (5.3 and 5.1%, respectively) which this effect was greater for SFM. Therefore, the caecectomy is an effective method for increasing precision in measurements of the digestibility of amino acids for these meals in bioassays based on excreta collection in adult cockerels.

Keywords: amino acid digestibility, caecectomy, canola meal, soybean meal, sunflower

meal

[PDF (246K)] [References]

Download Meta of Article[Help]

RIS

BibTeX

To cite this article:

Ali Nouri-Emamzadeh and Akbar Yaghobfar "Influence of Caecectomy on Digestibility of Amino Acids for Soybean, Canola and Sunflower Meals in Adult Cockerels" J. Poult. Sci., Vol. 46: 19-24. (2009).

doi:10.2141/jpsa.46.19

JOI JST.JSTAGE/jpsa/46.19

Copyright (c) 2009 by Japan Poultry Science Association









Japan Science and Technology Information Aggregator, Electronic **JSTAGE**

