

Abstract

This experiment was conducted to determine the nutritional requirement of digestible methionine (dmet) in growing Japanese quail from 7 to 28 d of age. A total of 540 seven-day-old quail chicks were allotted in 9 treatments including several levels of dmet (0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.60, 0.65, 0.70 and 0.75 %) with 4 replicates and 15 birds in each based on completely randomized design. A basal diet was formulated to meet all nutritional needs except of met, and to create experimental treatments incremental levels DL-met was added to the basal diet at expense corn starch. Growth data for body weight gain (BWG), feed intake (FI), and feed conversion ratio (FCR) were recorded weekly. The results showed that the highest BWG and FI ($p < 0.05$) were obtained with 0.5% of dmet (7-14, 7-21, and 7-28 d of age). The lowest FCR ($p < 0.05$) was obtained at the 0.5% of dmet from 7-14 and 7-28 d of age. No significant (thigh, breast, liver, and length small intestine) during the study. Also, the effects of dietary met were not significant on the immune organs including spleen and bursa of fabricius ($p > 0.05$).

Key words: Japanese quail, Digestible methionine, Requirement, Performance



University of Zabol
Graduate school
Faculty of Agriculture
Department of Animal Science

**The Thesis Submitted for the Degree of M.Sc
In the field of Poultry Production and Management**

Title:

**Estimation of digestible methionine
requirements in Japanese quail from 7
to 28 days of age**

Supervisor:

Dr. M. Mehri

Advisers:

Dr. F. Bagherzadeh Kasmani

Msc. M. Ghazaghi

By:

M. Vahidi

October 2013