**Lysine and Valine requirement of 7 to 21 days old Ross 308 broiler chickens fed corn-soybean meal based diets**

Valine is the next limiting amino acid (AA) after threonine but there is still some discrepancy in published recommendations. Evaluating the valine requirement under the ideal protein concept requires that a dietary sub-limiting Lys level is used. The first experiment aims at determining the adequate digestible Lys (dLys) level to assess digestible valine (dVal) requirement and the second experiment is a dose-response to increased levels of dietary dVal. In both experiments, 576 broilers were assigned to 6 replicates of 6 dietary dLys or dVal from 7 to 21d at BARC facilities, Bangkok. Diets were corn-SBM based diets and varied from 1.0 to 1.40% dLys (Exp. 1) or from 64 to 89% dVal:Lys (Expe 2). Feed intake and FCR were linearly decreased while body weight gain was linearly increased in response to dLys content. No requirement could be estimated for dLys with a non-linear plateau model but 1.05% dLys was estimated to be sub-limiting for performance and was used as a reference for the 2nd experiment. A curvilinear-plateau model estimated the Val requirement of 7-21d broilers to be 82.5, 81.2 and 80.4% dVal:Lys for feed intake, body weight and FCR, respectively. Interestingly, the response to Val was even stronger in the common period from 21 to 35d resulting in a difference of 107g of body weight at 35d. Increasing dVal also improved broiler uniformity. In conclusion, 7-21d broiler Lys and Val requirement seem to be under-estimated and a correct Val requirement would be at least 80% dVal:Lys to maximize performance.