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by Pirgozliev, V., Rose, S.P., Mirza, M.W., Whiting, I.M., Malins, H., Bauer, L. and Lemme, A.

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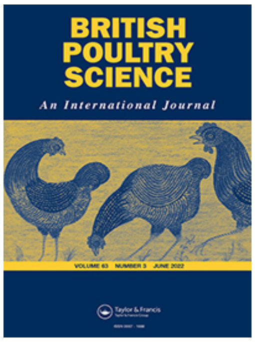

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Response to letter to the editors by Behnam Saremi referring to the article 'Feeding guanidinoacetic acid to broiler chickens can compensate for low dietary metabolizable energy formulation' by Pirgozliev et al

V. Pirgozliev [1], S. P. Rose [1], M. W. Mirza[1], I. M. Whiting[1], H. Malins[2], L. Bauer[3] and A. Lemme [3]

[1]NIPH, Harper Adams University, Shropshire, TF10 8NB, UK; [2]Pure Offices, Lake View House, Wilton Drive, Suite 23 / Evonik, GB-Warwick CV34 6RG, UK; [3]Evonik Operations GmbH, Rodenbacher Chaussee 4, 63457 Hanau-Wolfgang, Germany

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Firstly, B. Saremi stated that the experimental set-up was not sensitive enough to evidence the conclusion that GAA supplementation can compensate for dietary energy reduction by 0.21 MJ AME or even 0.42 MJ AME (Pirgozliev et al., 2022). While he admitted that overall feed intake was affected by energy reduction of 0.21 MJ AME, he overlooked that also overall body weight gain was significantly affected. Indeed, performance data for the starter phase did not indicate differences, while performance data for the starter+grower phase indicated at least tendencies and from this it might be concluded that these effects of a rather small energy reduction accumulated with age and were only significant in the overall (starter+grower +finisher) data. Indeed, the responses per se were partly in contrast to expectations based on literature but this, however, was discussed in detail in the paper. We appreciate B. Saremi's interest in reviewing this paper, however the conclusions we drew on GAA's potential to compensate for dietary energy reduction were supported by statistics as well as being put into context.

Secondly, while linking crude protein and amino acid analyses to performance is basically reasonable, B. Saremi rather detected a copy paste error in reported crude protein and amino acid analyses for the NC1+ GAA and NC2+ GAA finisher diets. The figures shown were identical to the analyses of PC and NC1 starter diets. We would like to thank B. Saremi for finding this error and enabling us to correct it, however, this argumentation, especially in the last paragraph, is obsolete.

The revised Table 1b with the corrected values is below.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

V. Pirgozliev http://orcid.org/0000-0002-4213-7609
S. P. Rose http://orcid.org/0000-0001-6459-597X
A. Lemme http://orcid.org/0000-0003-2483-1506

Reference

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Table 1b. Analyses of the experimental diets.

Dietary phases	Starter Day 0–14				Grower Day 15–25				Finisher Day 26–42			
Dietary treatments[a]	PC	NC1	NC1+ GAA	NC2+ GAA	PC	NC1	NC1+ GAA	NC2+ GAA	PC	NC1	NC1+ GAA	NC2+ GAA
CP, g/kg	236	230	231	228	195	195	197	201	183	184	187	183
Lys, g/kg	14.9	14.6	14.6	14.3	11.1	12.8	11.3	12.1	10.4	10.7	10.7	10.4
Met+Cys, g/kg	10.0	10.2	10.4	9.9	7.9	8.4	7.9	8.6	7.6	7.8	7.8	7.6
Thr, g/kg	9.6	9.2	9.3	9.0	7.7	8.1	7.7	7.8	7.1	7.2	7.1	7.0
Arg, g/kg	15.6	14.7	14.9	14.5	12.4	12.3	12.1	12.4	11.1	11.4	11.4	11.2
Val, g/kg	12.3	11.8	11.7	11.6	9.0	8.9	8.9	9.0	8.2	8.4	8.3	8.2
Ile, g/kg	9.7	9.2	9.5	9.1	7.9	7.8	7.8	7.9	7.2	7.3	7.2	7.0
Leu, g/kg	17.3	16.3	16.4	16.1	13.9	13.8	13.8	14.0	12.8	13.0	12.9	12.8
$Gly_{equivalents}$, g/kg[a]	17.7	16.8	17.1	16.6	14.5	14.4	14.4	14.5	13.4	13.5	13.5	13.4
GAA, g/t	<10	<10	521	611	<10	<10	622	701	52	<10	583	638
Recovery, %[2]			90	106			108	122			101	111
AME, MJ/kg[3]	12.59	12.21	12.15	11.78	12.74	12.46	12.44	12.27	12.58	12.44	12.44	12.26
Recovery, %[4]	101	100	99	98	99	98	98	99	96	97	97	97
Difference to PC, MJ/kg		−0.38	−0.44	−0.81		−0.13	−0.15	−0.32		−0.15	−0.15	−0.32

[a]$Gly_{equivalents}$ = Gly + 0.714 * Ser [2] intended concentrations 600 g produced * 0.96 minimum purity [3] based on proximate analysis according to WPSA (1984) AME_N = 15.51 * crude protein, g/kg + 34.31 *ether extract, g/kg + 16.69 * starch, g/kg + 13.01 * sugar, g/kg [4] compared to calculated values

CONTACT V. Pirgozliev vpirgozliev@harper-adams.ac.uk Harper Adams University, TF10 8NB, Edgmond, Shropshire, UK