Table S1 Composition and nutritional value of broiler feed

Components	Age of birds, days	
	1–27	28–35
Wheat, %	44.97	31.49
Maize, %	20.00	33.00
Soya meal, %	18.34	8.60
Sunflower meal, %	6.00	5.00
Sunflower seed cake, %	0	6.50
Protein concentrate, %	3.60	5.50
Fish meal, %	2.86	0
Fodder yeast, %	2.00	4.00
L-lysine monohydrochloride, %	0.49	0.52
DL-methionine, %	0.28	0.30
L-threonine, %	0.11	0.11
Limestone meal, %	0.03	0.40
Monocalcium phosphate, %	0	0.25
Defluorinated phosphate, %	0.16	0
Table salt, %	0.08	0.14
Sodium sulphate, %	0.08	0.09
Premix P5 start U, %	1	1
100 g of mixed fodder contains:		
Exchangeable energy, Kcal/100 g	295	315
Humidity, %	11.82	10.45
Crude protein, %	22.00	19.01
Raw fat, %	2.51	6.00
Crude fiber, %	3.80	4.26
Ash in HCL, %	0.35	0.89
Linoleic acid, %	1.12	3.05
Lysine, %	1.25	1.10
Methionine, %	0.60	0.58
Methionine + cystine, %	0.91	0.86
Threonine, %	0.82	0.73
Tryptophan, %	0.22	0.20
Digestible lysine, %	0.55	0.98
Digestible methionine, %	0.70	0.54
Digestible methionine + cystine, %	0.77	0.76
Digestible threonine, %	0.70	0.62
Calcium, %	0.90	0.82
Phosphorus, %	0.58	0.51
Digestible phosphorus, %	0.44	0.39
Potassium, %	0.74	0.47
Chlorine, %	0.21	0.22
Sodium, %	0.16	0.16
Sodium chloride, %	0.35	0.40

Table S2 Vitamin and mineral premix composition, per 1 kg of feed

Components	Age of birds, days	
	1–27	28–35
Vitamin A, 10^4 IU/kg^{-1}	1.4	1.1
Vitamin D3, 10^3 IU/kg^{-1}	5.00	5.00
Vitamin E, mg/kg	80.00	50.00
Vitamin K3, mg	4.00	3.00
Vitamin B1, mg	4.00	2.00
Vitamin B2, mg	9.00	8.00
Vitamin B3 (niacin), mg	15.00	12.00
Vitamin B4, mg	400.00	350.00
Vitamin B5, mg	60.00	50.00
Vitamin B6, mg	4.00	3.00
Vitamin B9 (Folium), mg	2.00	1.50
Vitamin B12, mg	0.020	0.020
Vitamin H (biotin), mg	0.200	0.180
Iron, mg	40.00	40.00
Manganese, mg	100.00	100.00
Zinc, mg	100.00	100.00
Copper, mg	15.00	15.00
Iodine, mg	1.00	1.00
Selenium, mg	0.30	0.30
Endox, mg	124.00	125.00
Rovabio Excel AP, mg	50.00	50.00
Chostazim P10000, mg	50.00	50.00

Table S3 Means±SEM of clinical and biochemical blood parameters and blood color index of Ross 308 broiler chickens in response to GLY, GLY+ANT, and GLY+AD intake (*n*=3 per group)

Age, days	Groups			
	I	II	III	IV
Number of erythrocytes, × 10^6 μl^{-1} (norm range: 1.5–2.3 × 10^6 μl^{-1})				
1*	2.3 ± 0.11			
7	1.7 ± 0.01	1.7 ± 0.08	1.6 ± 0.22	1.6 ± 0.08
14	2.0 ± 0.17	2.0 ± 0.03	1.7 ± 0.25	1.7 ± 0.02
40	2.8 ± 0.47	2.5 ± 0.18	2.7 ± 0.11	2.4 ± 0.22
White blood cell count, × 10^3 μl^{-1} (norm range: 1.9–3.6 × 10^4 μl^{-1})				
1*	16.5 ± 1.15			
7	19.3 ± 3.17	20.7 ± 2.55	18.3 ± 2.01	19.3 ± 0.45
14	20.7 ± 3.48	20.4 ± 2.24	19.9 ± 2.25	18.7 ± 2.16
40	19.6 ± 0.91	19.1 ± 2.06	19.2 ± 1.66	18.7 ± 2.92
Platelet count, × 10^4 μl^{-1} (norm range: 3.2–10.0 × 10^4 μl^{-1})				
1*	77.7 ± 14.03			
7	52.8 ± 6.09	62.1 ± 6.31	50.3 ± 14.15	62.8 ± 4.45
14	59.4 ± 4.94	48.9 ± 7.60	49.8 ± 13.81	58.4 ± 2.57
40	57.9 ± 9.87	40.0 ± 4.56	51.2 ± 18.42	48.7 ± 12.03
Hemoglobin concentration, g/L (norm range: 80–120 g/L)				
1*	82.7 ± 6.85			
7	71.7 ± 3.68^{a}	61.7 ± 5.73^{b}	68.3 ± 4.03^{a,b}	75.0 ± 2.83^{a}
14	91.7 ± 5.44^{a}	83.7 ± 1.70^{b}	85.0 ± 3.74^{a,b}	83.0 ± 0.82^{b}
40	100.7 ± 10.66	96.0 ± 4.32	98.7 ± 10.78	100.7 ± 17.25
Blood color index (norm range: 2–4)				
1*	2.2 ± 0.08			
7	2.6 ± 0.13^{a}	2.2 ± 0.14^{b}	2.6 ± 0.39^{a}	2.8 ± 0.10^{a}
14	2.8 ± 0.28	2.6 ± 0.07	3.0 ± 0.36	2.9 ± 0.01
40	2.2 ± 0.24	2.3 ± 0.19	2.2 ± 0.18	2.6 ± 0.60

* As determined before drug administration; a–b, data with a common superscript do not differ significantly ($p > 0.05$) between groups.

Table S4 Mean±SEM of biochemical blood parameters in Ross 308 broiler chickens, including amylase, alkaline phosphatase (ALP), alanine aminotransferase (ALAT), and aspartate aminotransferase (ASAT) activities, in response to GLY, GLY+ANT, and GLY+AD intake (*n*=3 per group)

Groups	Age, days	Amylase, g/hr/L	ALP, IU/L	ALAT, IU/L	ASAT, IU/L
	1*	29.6 ± 1.24	148.4 ± 3.78	1.3 ± 0.17	21.8 ± 2.04
I	7	31.4 ± 1.86	110.5 ± 1.54[a]	2.3 ± 0.11[a]	37.8 ± 3.21[a]
	14	22.6 ± 3.95	107.9 ± 4.13[a]	3.1 ± 0.12	22.0 ± 1.65
	40	15.5 ± 0.78[a]	82.2 ± 2.54[a]	2.6 ± 0.09[a]	18.3 ± 0.72
II	7	32.3 ± 2.37	115.1 ± 7.04[a]	4.6 ± 0.11[b]	43.4 ± 0.05[b]
	14	17.4 ± 0.82	131.5 ± 5.71[b]	3.5 ± 0.36	21.4 ± 2.21
	40	21.7 ± 1.61[b]	116.1 ± 4.17[b]	3.3 ± 0.14[b]	20.4 ± 1.1
III	7	32.6 ± 2.17	111.5 ± 1.92[a]	4.4 ± 0.8[b]	33.4 ± 1.62[c]
	14	18.5 ± 1.26	124.7 ± 5.61[b]	3.4 ± 0.36	18.2 ± 1.29
	40	18.4 ± 0.82[c]	98.4 ± 5.08[a]	2.9 ± 0.13[a]	18.3 ± 1.01
IV	7	31.2 ± 1.28	123.3 ± 6.01[b]	4.8 ± 0.49[b]	37.1 ± 4.51[a]
	14	18.5 ± 0.96	121.0 ± 10.32[b]	3.3 ± 0.08	19.9 ± 1.97
	40	18.4 ± 0.65[c]	85.4 ± 5.26[a]	2.7 ± 0.26[a]	19.0 ± 2.07
Norm range		15.0–30.0	–	1.2–6.8	22.0–50.0

* As determined before drug administration; a–b, data with a common superscript do not differ significantly ($p > 0.05$) between groups.

Table S5 Mean±SEM of total protein concentration, as well as proteinogram in Ross 308 broiler chickens in response to GLY, GLY+ANT, and GLY+AD intake (*n*=3 per group)

Group	Total protein, g/l	Albumins		Globulins					
		%	g/L	α		β		γ	
				%	g/L	%	g/L	%	g/L
1 day old chicks									
*	21.3± 0.76	53.9± 1.86	11.5± 0.65	22.1± 1.94	4.7± 0.59	13.8± 2.02	2.9± 0.33	10.4± 1.66	2.2± 0.33
7 days old chicks									
I	27.7 ±1.36[a]	55.0± 1.37	15.2± 1.11[a]	16.1± 0.91	4.4± 0.08[a,b]	8.4± 1.55	2.3± 0.32[a]	20.6± 1.14	5.7± 0.59[a]
II	24.7 ±0.83[b]	51.1± 1.21	12.5± 0.15[b]	19.3± 1.92	4.7± 0.53[a]	14.0± 2.58	3.4± 0.46[b]	15.7± 1.96	3.8± 0.36[b]
III	23.0± 0.41[b]	50.1± 1.25	11.5± 0.11[b]	17.1± 1.25	3.9± 0.36[b]	14.4± 1.65	3.3± 0.41[b]	18.3± 2.06	4.2± 0.46[b]
IV	21.9± 1.67[b]	50.3± 1.16	11.0± 1.01[b]	16.0± 0.45	3.5± 0.36[b]	17.2± 2.37	3.9± 0.53[b]	16.0± 1.15	3.5± 0.29[b]
14 days old chicks									
I	35.8± 1.97[a]	54.3± 0.82	19.4± 0.79[a]	12.3± 1.77	4.4± 0.76[a]	10.8± 2.45	3.8± 0.83[a]	22.3± 0.83	8.1± 0.66[a]
II	30.8± 0.71[b]	44.3± 0.83	13.6± 0.17[b]	24.4± 0.64	7.5± 0.33[b]	15.6± 1.68	4.8± 0.57[b]	15.7± 0.68	4.8± 0.21[b]
III	30.1± 0.91[b]	50.4± 0.82	16.2± 0.69[c]	16.3± 2.54	4.9± 0.74[a]	16.1± 1.27	4.8± 0.42[b]	17.2± 1.01	5.2± 0.32[b]
IV	32.2± 1.04[a,b]	50.5± 0.63	16.2± 0.39[c]	16.6± 1.37	5.4± 0.31[a,b]	17.4± 2.66	5.6± 1.02[b]	15.5± 0.71	5.0± 0.07[b]
40 days old broilers									
I	47.6± 1.21[a]	54.5± 0.99	29.9± 0.86[a]	9.2± 1.84	4.4± 0.76[a]	15.9± 1.30	7.6± 0.74	20.4± 0.69	9.7± 0.57[a]
II	39.7± 1.1[b]	49.5± 0.57	19.6± 0.33[b]	19.1± 2.55	7.6± 1.10[b]	16.0± 2.53	6.3± 0.95	15.0± 0.76	6.1± 0.47[b]
III	42.2± 0.55[b]	51.6± 1.23	21.8± 0.73[b]	16.4± 3.07	6.9± 1.35[b]	16.2± 2.69	6.8± 1.04	15.9± 0.51	6.7± 0.13[b]
IV	42.2± 0.67[b]	51.1± 1.65	21.0± 0.38[b]	15.3± 1.23	6.2± 0.56[b]	16.8± 0.42	6.9± 0.27	16.7± 1.05	6.8± 0.54[b]

* As determined before drug administration; a–b, data with a common superscript do not differ significantly ($p > 0.05$) between groups.