

Table 1. Effect of By-O-Reg supplementation in diets on the performance of grower pigs.

Items	Treatment				SEM	P-value		
	NC	NB	PC	PB		Antibiotics	By-O-Reg	Interaction
BW, kg								
Initial	27.92	28.03	27.93	28.01	1.56	0.927	0.358	0.889
Wk 1	35.23	35.45	35.56	35.21	1.87	0.877	0.849	0.396
Wk 2	43.01	43.42	43.82	43.78	2.04	0.114	0.617	0.538
Wk 3	52.26	52.53	53.01	52.51	2.12	0.298	0.742	0.268
Wk 4	58.54	59.26	59.67	58.61	2.24	0.569	0.690	0.041
Wk 5	65.38	66.80	67.19	66.05	2.45	0.371	0.816	0.039
Wk 6	72.04	74.50	74.57	72.67	2.84	0.636	0.703	0.006
ADG, kg/d								
Wk 1	1.043	1.059	1.091	1.029	0.060	0.840	0.604	0.381
Wk 2	1.113	1.139	1.180	1.224	0.049	0.100	0.440	0.838
Wk 3	1.321	1.302	1.325	1.247	0.034	0.393	0.111	0.323
Wk 4	1.047	1.122	1.110	1.018	0.051	0.529	0.799	0.018
Wk 5	1.139	1.255	1.254	1.240	0.062	0.313	0.301	0.190
Wk 6	1.109	1.284	1.229	1.102	0.101	0.647	0.722	0.032
Phase 4	1.159	1.167	1.199	1.167	0.031	0.232	0.465	0.230
Phase 5	1.099	1.221	1.198	1.120	0.048	0.980	0.450	0.002
Overall	1.129	1.194	1.198	1.143	0.037	0.619	0.789	0.004
ADFI, kg/d								
Wk 1	1.896	1.870	1.891	1.895	0.092	0.824	0.814	0.731
Wk 2	2.198	2.258	2.273	2.168	0.093	0.874	0.650	0.105
Wk 3	2.578	2.681	2.617	2.527	0.092	0.329	0.913	0.106
Wk 4	2.476	2.572	2.534	2.308	0.159	0.092	0.279	0.011
Wk 5	2.987	2.938	2.910	2.480	0.143	0.035	0.056	0.125
Wk 6	2.778	2.883	2.986	2.961	0.263	0.223	0.732	0.578
Phase 4	2.224	2.270	2.260	2.197	0.087	0.635	0.825	0.175
Phase 5	2.747	2.797	2.810	2.583	0.162	0.167	0.109	0.015
Overall	2.486	2.534	2.535	2.390	0.106	0.261	0.246	0.026
G:F								
Wk 1	0.549	0.565	0.581	0.545	0.019	0.751	0.588	0.179
Wk 2	0.510	0.509	0.520	0.571	0.024	0.087	0.232	0.215
Wk 3	0.514	0.489	0.508	0.500	0.015	0.831	0.192	0.504
Wk 4	0.428	0.439	0.441	0.442	0.014	0.493	0.613	0.668
Wk 5	0.384	0.433	0.439	0.508	0.024	0.005	0.010	0.645
Wk 6	0.401	0.452	0.410	0.373	0.024	0.110	0.742	0.046
Phase 4	0.523	0.516	0.533	0.535	0.009	0.034	0.711	0.479
Phase 5	0.399	0.438	0.427	0.435	0.012	0.100	0.004	0.052
Overall	0.455	0.473	0.474	0.481	0.009	0.014	0.023	0.278

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BW, kg								
Initial	27.92	28.03	27.93	28.01	1.56	0.927	0.358	0.889
Wk 1	35.23	35.45	35.56	35.21	1.87	0.877	0.849	0.396
Wk 2	43.01	43.42	43.82	43.78	2.04	0.114	0.617	0.538
Wk 3	52.26	52.53	53.01	52.51	2.12	0.298	0.742	0.268
Wk 4	58.54	59.26	59.67	58.61	2.24	0.569	0.690	0.041
Wk 5	65.38	66.80	67.19	66.05	2.45	0.371	0.816	0.039
Wk 6	72.04	74.50	74.57	72.67	2.84	0.636	0.703	0.006
ADG, kg/d								
Wk 1	1.043	1.059	1.091	1.029	0.060	0.840	0.604	0.381
Wk 2	1.078	1.099	1.139	1.127	0.039	0.078	0.796	0.525
Wk 3	1.159	1.167	1.199	1.167	0.031	0.232	0.465	0.230
Wk 4	1.131	1.156	1.176	1.129	0.028	0.530	0.451	0.023
Wk 5	1.133	1.176	1.192	1.152	0.031	0.326	0.939	0.026
Wk 6	1.129	1.194	1.198	1.143	0.037	0.619	0.789	0.004
ADFI kg/d								
Wk 1	1.896	1.870	1.891	1.895	0.092	0.824	0.814	0.731
Wk 2	2.047	2.064	2.082	2.032	0.090	0.981	0.692	0.424
Wk 3	2.224	2.270	2.260	2.197	0.087	0.635	0.825	0.175
Wk 4	2.287	2.346	2.329	2.224	0.089	0.316	0.561	0.046
Wk 5	2.427	2.464	2.445	2.276	0.095	0.106	0.204	0.053
Wk 6	2.486	2.534	2.535	2.390	0.106	0.261	0.246	0.026
G:F								
Wk 1	0.549	0.565	0.581	0.545	0.019	0.751	0.588	0.179
Wk 2	0.529	0.534	0.548	0.557	0.009	0.006	0.322	0.814
Wk 3	0.523	0.516	0.533	0.535	0.009	0.034	0.711	0.479
Wk 4	0.497	0.495	0.508	0.511	0.009	0.021	0.941	0.632
Wk 5	0.469	0.479	0.491	0.510	0.010	0.001	0.051	0.565
Wk 6	0.455	0.473	0.474	0.481	0.009	0.014	0.023	0.278

Table 2. Sum

Table 3. Effect of By-O-Reg supplementation in diets on TNF-alpha, IgG and protein carbonyl in serum of grower pigs.

	Treatment				SEM	P-value		
	NC	NB	PC	PB		Antibiotics	By-O-Reg	Interaction
TNF- α , pg/mL	72.33	81.89	75.45	75.67	4.49	0.659	0.171	0.190
IgG, mg/mL	10.42	9.33	10.38	8.18	0.61	0.341	0.011	0.370
Protein carbonyl, nmol/mg protein	5.21	3.88	5.45	4.26	0.32	0.341	<0.001	0.827