

Article

Investigation of the Effect of Three Commercial Water Acidifiers on the Performance, Gut Health, and *Campylobacter jejuni* Colonization in Experimentally Challenged Broiler Chicks

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Table S1. Ingredients and calculated analysis of the starter (1 to 15 days) and for finisher (16 to 39 d) diets.

| Ingredients (g/kg feed) | Starter (1-15 days) | Finisher (16-39 days) |
|----------------------------|------------------------|--------------------------|
| Wheat | 461.5 | 390 |
| Soybean meal (CP 47%) | 304 | 273 |
| Corn | 100 | 212 |
| Soybean oil | 50 | 55 |
| Fish meal 65% | 25 | 12.3 |
| Nutriphos 22% | 15.3 | 12.7 |
| Calcium carbonate | 12.8 | 10.9 |
| Phytogenic fat (99%) | - | 20.5 |
| Gluten 60% | 14.2 | - |
| Adisodium | 2.4 | 2 |
| Threonine-L | 1.3 | 0.5 |
| Choline CL 50% | 0.2 | - |
| Methionine DL | 2.1 | 1.7 |
| Lysine HCL | 2.7 | 1.5 |
| Salt | 1.5 | 1.9 |
| Vitamin premix2 | 2 | 2 |
| Nutrients premix3 | 2 | 2 |
| Clinacox | 0.2 | 0.2 |
| Smectagri | 2 | 2 |
| Xylanase 8000 G | 0.3 | 0.3 |
| Calculated analysis (g/kg) | | |
| Moisture | 10.48 | 10.51 |
| Dry matter | 89.41 | 89.38 |
| Crude protein | 22.84 | 19.50 |
| Crude fibre | 2.34 | 2.29 |
| Crude fat | 6.74 | 9.45 |
| Crude Ash | 6.25 | 5.45 |
| Starch | 35.50 | 38.00 |
| Methionine | 0.54 | 0.46 |
| Methionine + Cysteine | 0.99 | 0.84 |
| Lysine | 1.41 | 1.15 |
| Threonine | 0.96 | 0.77 |
| Tryptophan | 0.28 | 0.24 |
| Arginine | 1.47 | 1.29 |

| | | |
|------------------|---------|---------|
| Valine | 1.06 | 0.92 |
| Leucine | 1.76 | 1.51 |
| Isoleucine | 0.96 | 0.83 |
| Linoleic acid | 3.34 | 5.75 |
| Calcium | 0.97 | 0.79 |
| Phosphorus | 0.78 | 0.66 |
| Sodium Chloride | 0.15 | 0.19 |
| Energy (Kcal/kg) | 3018.00 | 3200.26 |

²Contents per kg: 6,000,000 I.U. retinyl acetate; 2,000,000 I.U. cholecalciferol; 40,000 mg DL- α -tocopheryl acetate; 4,500 mg menadione sodium bisulphite; 1,500 mg thiamin; 3,500 mg riboflavin; 3,000 mg pyridoxine HCl; 12.5 μ g cobalamin; 25,000 mg niacin; 75 mg biotin; 750 mg folic acid; 7,500 mg pantothenic acid.

³Contents per kg: 200,000 mg choline chloride; 25,000 mg Fe; 45,000 mg Zn; 65,000 mg Mn; 10,000 mg Cu; 750 mg I; 150 mg Se.

Table S2. Composition of reagents used for *C. jejuni* DNA extraction.

| Reagent | Composition |
|------------------|--|
| Dispersal buffer | 50 mM Tris-HCl, 50 mM ethylenediaminetetraacetate (EDTA), 1% v/v TritonX-100, pH 7.5 |
| Lysis buffer I | 50 mM Tris-HCl, 50 mM EDTA, 4 M GuHCl, 10 mM CaCl ₂ , 1% v/v Triton x-100, 2% N-Lauroyl-Sarcosine, pH 7.5 |
| Lysis buffer II | 50 mM Tris-HCl, 25 mM EDTA, 8 M GuHCl, 3% v/v Triton X-100, 3% N-Lauroyl-Sarcosine, pH 6.3 |
| Wash I buffer | 25 mM Tris-HCl, 4 M GHCl, 50% ethanol, pH 6.6 |
| Wash buffer II | 10 mM Tris-HCl, 80% ethanol, 100 mM NaCl, pH 6.6 |

All reagents used were purchased from Sigma-Aldrich (St Louis, USA)