

BROILER

ROSS 308 AP

Nutrition
Specifications

2017



ROSS 308 AP BROILER: Nutrition Specifications

Introduction

Nutrition specifications for broilers are given in the following tables for a range of production and market situations across the world:

| | | |
|------------|---|---------|
| As-Hatched | ≤ 1.60 kg (3.50 lb) live weight | Table 1 |
| As-Hatched | 1.70 – 2.40 kg (3.75 – 5.30 lb) live weight | Table 2 |
| As-Hatched | 2.50 – 3.00 kg (5.50 – 6.60 lb) live weight | Table 3 |
| As-Hatched | 3.10 – 3.50 kg (6.85 – 7.70 lb) live weight | Table 4 |
| As-Hatched | 3.60 – 4.00 kg (7.95 – 8.80 lb) live weight | Table 5 |

Modifications may need to be made for specific market conditions. Factors to be considered are:

- Final product - live bird or portioned products - and meat product values.
- The supply and price of feed ingredients.
- Age and live weight at processing.
- Yield and carcass quality.
- Market requirements for skin color, shelf-life, etc.
- Use of sex-separate growing.

The most appropriate diet will be designed to either minimize cost for live bird production or maximize margin over feeding cost for portioned products required by the processing plant. For optimal portions margin, increased dietary amino acid density may be cost-effective.

The energy values used in these specifications are based on assays for Metabolizable Energy published by the World's Poultry Science Association (WPSA). The values for amino acid digestibility are based on Standardized Ileal Digestibility (SID) assays.

The local Aviagen® Nutrition Service Manager or Technical Service Manager should be consulted for more specialized situations and for advice on local markets.

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ROSS 308 AP BROILER: Nutrition Specifications

Table 1

Nutrition Specifications for As-Hatched Broilers - Target Live Weight ≤1.60 kg (3.50 lb).

| | | Starter | | Grower | | Finisher | |
|------------------------------------|------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| Age Fed | days | 0 - 10 | | 11 - 24 | | 25 - market | |
| Energy | kcal | 3000 | | 3100 | | 3200 | |
| | MJ | 12.55 | | 12.97 | | 13.39 | |
| AMINO ACIDS | | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ |
| Lysine | % | 1.44 | 1.28 | 1.29 | 1.15 | 1.19 | 1.06 |
| Methionine + Cystine | % | 1.08 | 0.95 | 0.99 | 0.87 | 0.94 | 0.83 |
| Methionine | % | 0.56 | 0.51 | 0.51 | 0.47 | 0.48 | 0.45 |
| Threonine | % | 0.97 | 0.86 | 0.88 | 0.77 | 0.81 | 0.71 |
| Valine | % | 1.10 | 0.96 | 1.00 | 0.87 | 0.93 | 0.81 |
| Isoleucine | % | 0.97 | 0.86 | 0.89 | 0.78 | 0.83 | 0.73 |
| Arginine | % | 1.52 | 1.37 | 1.37 | 1.23 | 1.26 | 1.13 |
| Tryptophan | % | 0.23 | 0.20 | 0.21 | 0.18 | 0.19 | 0.17 |
| Leucine | % | 1.58 | 1.41 | 1.42 | 1.27 | 1.31 | 1.17 |
| Crude Protein ² | % | 23.0 | | 21.5 | | 20.0 | |
| MINERALS | | | | | | | |
| Calcium | % | 0.96 | | 0.87 | | 0.81 | |
| Available Phosphorus | % | 0.480 | | 0.435 | | 0.405 | |
| Magnesium | % | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | |
| Sodium | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.20 | |
| Chloride | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | |
| Potassium | % | 0.40 - 1.00 | | 0.40 - 0.90 | | 0.40 - 0.90 | |
| ADDED TRACE MINERALS PER KG | | | | | | | |
| Copper | mg | 16 | | 16 | | 16 | |
| Iodine | mg | 1.25 | | 1.25 | | 1.25 | |
| Iron | mg | 20 | | 20 | | 20 | |
| Manganese | mg | 120 | | 120 | | 120 | |
| Selenium | mg | 0.30 | | 0.30 | | 0.30 | |
| Zinc | mg | 110 | | 110 | | 110 | |
| ADDED VITAMINS PER KG | | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed |
| Vitamin A | IU | 13,000 | 12,000 | 11,000 | 10,000 | 10,000 | 9000 |
| Vitamin D3 | IU | 5000 | 5000 | 4500 | 4500 | 4000 | 4000 |
| Vitamin E | IU | 80 | 80 | 65 | 65 | 55 | 55 |
| Vitamin K (Menadione) | mg | 3.2 | 3.2 | 3.0 | 3.0 | 2.2 | 2.2 |
| Thiamin (B1) | mg | 3.2 | 3.2 | 2.5 | 2.5 | 2.2 | 2.2 |
| Riboflavin (B2) | mg | 8.6 | 8.6 | 6.5 | 6.5 | 5.4 | 5.4 |
| Niacin | mg | 60 | 65 | 55 | 60 | 40 | 45 |
| Pantothenic Acid | mg | 17 | 20 | 15 | 18 | 13 | 15 |
| Pyridoxine (B6) | mg | 5.4 | 4.3 | 4.3 | 3.2 | 3.2 | 2.2 |
| Biotin | mg | 0.30 | 0.22 | 0.25 | 0.18 | 0.20 | 0.15 |
| Folic Acid | mg | 2.20 | 2.20 | 1.90 | 1.90 | 1.60 | 1.60 |
| Vitamin B12 | mg | 0.017 | 0.017 | 0.017 | 0.017 | 0.011 | 0.011 |
| MINIMUM SPECIFICATION | | | | | | | |
| Choline per kg | mg | 1700 | | 1600 | | 1550 | |
| Linoleic Acid | % | 1.25 | | 1.20 | | 1.00 | |

Digest¹ = Digestible

Crude Protein² = Formulation priority is to meet the recommended minimum essential amino acid levels. These crude protein levels are not requirements *per se*, but instead are levels which will likely occur when achieving the aforementioned essential amino acid minimums.

NOTES: *These feed specifications should be used as a guide. They require adjustment for local conditions and markets. A withdrawal feed should be fed to meet local requirements for drug withdrawal times. This can be formulated to the same standards as the final feed listed above.*

ROSS 308 AP BROILER: Nutrition Specifications

Table 2

Nutrition Specifications for As-Hatched Broilers - Target Live Weight 1.70 - 2.40 kg (3.75 - 5.30 lb).

| | | Starter | | Grower | | Finisher | |
|------------------------------------|------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| Age Fed | days | 0 - 10 | | 11 - 24 | | 25 - market | |
| Energy | kcal | 3000 | | 3100 | | 3200 | |
| | MJ | 12.55 | | 12.97 | | 13.39 | |
| AMINO ACIDS | | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ |
| Lysine | % | 1.44 | 1.28 | 1.29 | 1.15 | 1.16 | 1.03 |
| Methionine + Cystine | % | 1.08 | 0.95 | 0.99 | 0.87 | 0.91 | 0.80 |
| Methionine | % | 0.56 | 0.51 | 0.51 | 0.47 | 0.47 | 0.43 |
| Threonine | % | 0.97 | 0.86 | 0.88 | 0.77 | 0.78 | 0.69 |
| Valine | % | 1.10 | 0.96 | 1.00 | 0.87 | 0.90 | 0.78 |
| Isoleucine | % | 0.97 | 0.86 | 0.89 | 0.78 | 0.81 | 0.71 |
| Arginine | % | 1.52 | 1.37 | 1.37 | 1.23 | 1.22 | 1.10 |
| Tryptophan | % | 0.23 | 0.20 | 0.21 | 0.18 | 0.19 | 0.16 |
| Leucine | % | 1.58 | 1.41 | 1.42 | 1.27 | 1.27 | 1.13 |
| Crude Protein ² | % | 23.0 | | 21.5 | | 19.5 | |
| MINERALS | | | | | | | |
| Calcium | % | 0.96 | | 0.87 | | 0.79 | |
| Available Phosphorus | % | 0.480 | | 0.435 | | 0.395 | |
| Magnesium | % | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | |
| Sodium | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.20 | |
| Chloride | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | |
| Potassium | % | 0.40 - 1.00 | | 0.40 - 0.90 | | 0.40 - 0.90 | |
| ADDED TRACE MINERALS PER KG | | | | | | | |
| Copper | mg | 16 | | 16 | | 16 | |
| Iodine | mg | 1.25 | | 1.25 | | 1.25 | |
| Iron | mg | 20 | | 20 | | 20 | |
| Manganese | mg | 120 | | 120 | | 120 | |
| Selenium | mg | 0.30 | | 0.30 | | 0.30 | |
| Zinc | mg | 110 | | 110 | | 110 | |
| ADDED VITAMINS PER KG | | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed |
| Vitamin A | IU | 13,000 | 12,000 | 11,000 | 10,000 | 10,000 | 9000 |
| Vitamin D3 | IU | 5000 | 5000 | 4500 | 4500 | 4000 | 4000 |
| Vitamin E | IU | 80 | 80 | 65 | 65 | 55 | 55 |
| Vitamin K (Menadione) | mg | 3.2 | 3.2 | 3.0 | 3.0 | 2.2 | 2.2 |
| Thiamin (B1) | mg | 3.2 | 3.2 | 2.5 | 2.5 | 2.2 | 2.2 |
| Riboflavin (B2) | mg | 8.6 | 8.6 | 6.5 | 6.5 | 5.4 | 5.4 |
| Niacin | mg | 60 | 65 | 55 | 60 | 40 | 45 |
| Pantothenic Acid | mg | 17 | 20 | 15 | 18 | 13 | 15 |
| Pyridoxine (B6) | mg | 5.4 | 4.3 | 4.3 | 3.2 | 3.2 | 2.2 |
| Biotin | mg | 0.30 | 0.22 | 0.25 | 0.18 | 0.20 | 0.15 |
| Folic Acid | mg | 2.20 | 2.20 | 1.90 | 1.90 | 1.60 | 1.60 |
| Vitamin B12 | mg | 0.017 | 0.017 | 0.017 | 0.017 | 0.011 | 0.011 |
| MINIMUM SPECIFICATION | | | | | | | |
| Choline per kg | mg | 1700 | | 1600 | | 1500 | |
| Linoleic Acid | % | 1.25 | | 1.20 | | 1.00 | |

Digest¹ = Digestible

Crude Protein² = Formulation priority is to meet the recommended minimum essential amino acid levels. These crude protein levels are not requirements *per se*, but instead are levels which will likely occur when achieving the aforementioned essential amino acid minimums.

NOTES: *These feed specifications should be used as a guide. They require adjustment for local conditions and markets. A withdrawal feed should be fed to meet local requirements for drug withdrawal times. This can be formulated to the same standards as the final feed listed above.*

ROSS 308 AP BROILER: Nutrition Specifications

Table 3

Nutrition Specifications for As-Hatched Broilers - Target Live Weight 2.50 - 3.00 kg (5.50 - 6.60 lb).

| | | Starter | | Grower | | Finisher 1 | | Finisher 2 | |
|------------------------------------|------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| Age Fed | days | 0 - 10 | | 11 - 24 | | 25 - 39 | | 40 - market | |
| Energy | kcal | 3000 | | 3100 | | 3200 | | 3200 | |
| | MJ | 12.55 | | 12.97 | | 13.39 | | 13.39 | |
| AMINO ACIDS | | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ |
| Lysine | % | 1.44 | 1.28 | 1.29 | 1.15 | 1.15 | 1.02 | 1.08 | 0.96 |
| Methionine + Cystine | % | 1.08 | 0.95 | 0.99 | 0.87 | 0.90 | 0.80 | 0.85 | 0.75 |
| Methionine | % | 0.56 | 0.51 | 0.51 | 0.47 | 0.47 | 0.43 | 0.44 | 0.40 |
| Threonine | % | 0.97 | 0.86 | 0.88 | 0.77 | 0.78 | 0.68 | 0.73 | 0.64 |
| Valine | % | 1.10 | 0.96 | 1.00 | 0.87 | 0.89 | 0.78 | 0.84 | 0.73 |
| Isoleucine | % | 0.97 | 0.86 | 0.89 | 0.78 | 0.80 | 0.70 | 0.75 | 0.66 |
| Arginine | % | 1.52 | 1.37 | 1.37 | 1.23 | 1.21 | 1.09 | 1.14 | 1.03 |
| Tryptophan | % | 0.23 | 0.20 | 0.21 | 0.18 | 0.18 | 0.16 | 0.17 | 0.15 |
| Leucine | % | 1.58 | 1.41 | 1.42 | 1.27 | 1.26 | 1.12 | 1.19 | 1.06 |
| Crude Protein ² | % | 23.0 | | 21.5 | | 19.5 | | 18.3 | |
| MINERALS | | | | | | | | | |
| Calcium | % | 0.96 | | 0.87 | | 0.78 | | 0.75 | |
| Available Phosphorus | % | 0.480 | | 0.435 | | 0.390 | | 0.375 | |
| Magnesium | % | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | |
| Sodium | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.20 | | 0.16 - 0.20 | |
| Chloride | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | |
| Potassium | % | 0.40 - 1.00 | | 0.40 - 0.90 | | 0.40 - 0.90 | | 0.40 - 0.90 | |
| ADDED TRACE MINERALS PER KG | | | | | | | | | |
| Copper | mg | 16 | | 16 | | 16 | | 16 | |
| Iodine | mg | 1.25 | | 1.25 | | 1.25 | | 1.25 | |
| Iron | mg | 20 | | 20 | | 20 | | 20 | |
| Manganese | mg | 120 | | 120 | | 120 | | 120 | |
| Selenium | mg | 0.30 | | 0.30 | | 0.30 | | 0.30 | |
| Zinc | mg | 110 | | 110 | | 110 | | 110 | |
| ADDED VITAMINS PER KG | | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed |
| Vitamin A | IU | 13,000 | 12,000 | 11,000 | 10,000 | 10,000 | 9000 | 10,000 | 9000 |
| Vitamin D3 | IU | 5000 | 5000 | 4500 | 4500 | 4000 | 4000 | 4000 | 4000 |
| Vitamin E | IU | 80 | 80 | 65 | 65 | 55 | 55 | 55 | 55 |
| Vitamin K (Menadione) | mg | 3.2 | 3.2 | 3.0 | 3.0 | 2.2 | 2.2 | 2.2 | 2.2 |
| Thiamin (B1) | mg | 3.2 | 3.2 | 2.5 | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 |
| Riboflavin (B2) | mg | 8.6 | 8.6 | 6.5 | 6.5 | 5.4 | 5.4 | 5.4 | 5.4 |
| Niacin | mg | 60 | 65 | 55 | 60 | 40 | 45 | 40 | 45 |
| Pantothenic Acid | mg | 17 | 20 | 15 | 18 | 13 | 15 | 13 | 15 |
| Pyridoxine (B6) | mg | 5.4 | 4.3 | 4.3 | 3.2 | 3.2 | 2.2 | 3.2 | 2.2 |
| Biotin | mg | 0.30 | 0.22 | 0.25 | 0.18 | 0.20 | 0.15 | 0.20 | 0.15 |
| Folic Acid | mg | 2.20 | 2.20 | 1.90 | 1.90 | 1.60 | 1.60 | 1.60 | 1.60 |
| Vitamin B12 | mg | 0.017 | 0.017 | 0.017 | 0.017 | 0.011 | 0.011 | 0.011 | 0.011 |
| MINIMUM SPECIFICATION | | | | | | | | | |
| Choline per kg | mg | 1700 | | 1600 | | 1500 | | 1450 | |
| Linoleic Acid | % | 1.25 | | 1.20 | | 1.00 | | 1.00 | |

Digest¹ = Digestible

Crude Protein² = Formulation priority is to meet the recommended minimum essential amino acid levels. These crude protein levels are not requirements *per se*, but instead are levels which will likely occur when achieving the aforementioned essential amino acid minimums.

NOTES: These feed specifications should be used as a guide. They require adjustment for local conditions and markets. A withdrawal feed should be fed to meet local requirements for drug withdrawal times. This can be formulated to the same standards as the final feed listed above.

ROSS 308 AP BROILER: Nutrition Specifications

Table 4

Nutrition Specifications for As-Hatched Broilers - Target Live Weight 3.10 - 3.50 kg (6.85 - 7.70 lb).

| | | Starter | | Grower | | Finisher 1 | | Finisher 2 | | Finisher 3 | |
|------------------------------------|------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| Age Fed | days | 0 - 10 | | 11 - 24 | | 25 - 39 | | 40 - 46 | | 47 - market | |
| Energy | kcal | 3000 | | 3100 | | 3200 | | 3225 | | 3225 | |
| | MJ | 12.55 | | 12.97 | | 13.39 | | 13.49 | | 13.49 | |
| AMINO ACIDS | | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ |
| Lysine | % | 1.44 | 1.28 | 1.29 | 1.15 | 1.15 | 1.02 | 1.08 | 0.96 | 1.04 | 0.93 |
| Methionine + Cystine | % | 1.08 | 0.95 | 0.99 | 0.87 | 0.90 | 0.80 | 0.85 | 0.75 | 0.82 | 0.73 |
| Methionine | % | 0.56 | 0.51 | 0.51 | 0.47 | 0.47 | 0.43 | 0.44 | 0.40 | 0.42 | 0.39 |
| Threonine | % | 0.97 | 0.86 | 0.88 | 0.77 | 0.78 | 0.68 | 0.73 | 0.64 | 0.71 | 0.62 |
| Valine | % | 1.10 | 0.96 | 1.00 | 0.87 | 0.89 | 0.78 | 0.86 | 0.75 | 0.83 | 0.73 |
| Isoleucine | % | 0.97 | 0.86 | 0.89 | 0.78 | 0.80 | 0.70 | 0.75 | 0.66 | 0.73 | 0.64 |
| Arginine | % | 1.52 | 1.37 | 1.37 | 1.23 | 1.21 | 1.09 | 1.15 | 1.04 | 1.12 | 1.00 |
| Tryptophan | % | 0.23 | 0.20 | 0.21 | 0.18 | 0.18 | 0.16 | 0.17 | 0.15 | 0.17 | 0.15 |
| Leucine | % | 1.58 | 1.41 | 1.42 | 1.27 | 1.26 | 1.12 | 1.19 | 1.06 | 1.15 | 1.02 |
| Crude Protein ² | % | 23.0 | | 21.5 | | 19.5 | | 18.0 | | 17.5 | |
| MINERALS | | | | | | | | | | | |
| Calcium | % | 0.96 | | 0.87 | | 0.78 | | 0.74 | | 0.73 | |
| Available Phosphorus | % | 0.480 | | 0.435 | | 0.390 | | 0.370 | | 0.365 | |
| Magnesium | % | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | |
| Sodium | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.20 | | 0.16 - 0.20 | | 0.16 - 0.20 | |
| Chloride | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | |
| Potassium | % | 0.40 - 1.00 | | 0.40 - 0.90 | | 0.40 - 0.90 | | 0.40 - 0.90 | | 0.40 - 0.90 | |
| ADDED TRACE MINERALS PER KG | | | | | | | | | | | |
| Copper | mg | 16 | | 16 | | 16 | | 16 | | 16 | |
| Iodine | mg | 1.25 | | 1.25 | | 1.25 | | 1.25 | | 1.25 | |
| Iron | mg | 20 | | 20 | | 20 | | 20 | | 20 | |
| Manganese | mg | 120 | | 120 | | 120 | | 120 | | 120 | |
| Selenium | mg | 0.30 | | 0.30 | | 0.30 | | 0.30 | | 0.30 | |
| Zinc | mg | 110 | | 110 | | 110 | | 110 | | 110 | |
| ADDED VITAMINS PER KG | | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed |
| Vitamin A | IU | 13,000 | 12,000 | 11,000 | 10,000 | 10,000 | 9000 | 10,000 | 9000 | 10,000 | 9000 |
| Vitamin D3 | IU | 5000 | 5000 | 4500 | 4500 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 |
| Vitamin E | IU | 80 | 80 | 65 | 65 | 55 | 55 | 55 | 55 | 55 | 55 |
| Vitamin K (Menadione) | mg | 3.2 | 3.2 | 3.0 | 3.0 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| Thiamin (B1) | mg | 3.2 | 3.2 | 2.5 | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| Riboflavin (B2) | mg | 8.6 | 8.6 | 6.5 | 6.5 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 |
| Niacin | mg | 60 | 65 | 55 | 60 | 40 | 45 | 40 | 45 | 40 | 45 |
| Pantothenic Acid | mg | 17 | 20 | 15 | 18 | 13 | 15 | 13 | 15 | 13 | 15 |
| Pyridoxine (B6) | mg | 5.4 | 4.3 | 4.3 | 3.2 | 3.2 | 2.2 | 3.2 | 2.2 | 3.2 | 2.2 |
| Biotin | mg | 0.30 | 0.22 | 0.25 | 0.18 | 0.20 | 0.15 | 0.20 | 0.15 | 0.20 | 0.15 |
| Folic Acid | mg | 2.20 | 2.20 | 1.90 | 1.90 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 |
| Vitamin B12 | mg | 0.017 | 0.017 | 0.017 | 0.017 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 |
| MINIMUM SPECIFICATION | | | | | | | | | | | |
| Choline per kg | mg | 1700 | | 1600 | | 1500 | | 1450 | | 1400 | |
| Linoleic Acid | % | 1.25 | | 1.20 | | 1.00 | | 1.00 | | 1.00 | |

Digest¹ = Digestible

Crude Protein² = Formulation priority is to meet the recommended minimum essential amino acid levels. These crude protein levels are not requirements *per se*, but instead are levels which will likely occur when achieving the aforementioned essential amino acid minimums.

NOTES: These feed specifications should be used as a guide. They require adjustment for local conditions and markets. A withdrawal feed should be fed to meet local requirements for drug withdrawal times. This can be formulated to the same standards as the final feed listed above.

ROSS 308 AP BROILER: Nutrition Specifications

Table 5

Nutrition Specifications for As-Hatched Broilers - Target Live Weight 3.60 - 4.00 kg (7.95 - 8.80 lb).

| | | Starter | | Grower | | Finisher 1 | | Finisher 2 | | Finisher 3 | |
|------------------------------------|------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| Age Fed | days | 0 - 10 | | 11 - 24 | | 25 - 39 | | 40 - 51 | | 52 - market | |
| Energy | kcal | 3000 | | 3100 | | 3200 | | 3225 | | 3225 | |
| | MJ | 12.55 | | 12.97 | | 13.39 | | 13.49 | | 13.49 | |
| AMINO ACIDS | | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ | Total | Digest¹ |
| Lysine | % | 1.44 | 1.28 | 1.29 | 1.15 | 1.15 | 1.02 | 1.07 | 0.95 | 1.02 | 0.91 |
| Methionine + Cystine | % | 1.08 | 0.95 | 0.99 | 0.87 | 0.90 | 0.80 | 0.84 | 0.74 | 0.81 | 0.71 |
| Methionine | % | 0.56 | 0.51 | 0.51 | 0.47 | 0.47 | 0.43 | 0.43 | 0.40 | 0.42 | 0.38 |
| Threonine | % | 0.97 | 0.86 | 0.88 | 0.77 | 0.78 | 0.68 | 0.72 | 0.64 | 0.69 | 0.61 |
| Valine | % | 1.10 | 0.96 | 1.00 | 0.87 | 0.89 | 0.78 | 0.85 | 0.74 | 0.82 | 0.71 |
| Isoleucine | % | 0.97 | 0.86 | 0.89 | 0.78 | 0.80 | 0.70 | 0.74 | 0.66 | 0.71 | 0.63 |
| Arginine | % | 1.52 | 1.37 | 1.37 | 1.23 | 1.21 | 1.09 | 1.14 | 1.03 | 1.09 | 0.98 |
| Tryptophan | % | 0.23 | 0.20 | 0.21 | 0.18 | 0.18 | 0.16 | 0.17 | 0.15 | 0.16 | 0.15 |
| Leucine | % | 1.58 | 1.41 | 1.42 | 1.27 | 1.26 | 1.12 | 1.17 | 1.05 | 1.12 | 1.00 |
| Crude Protein ² | % | 23.0 | | 21.5 | | 19.5 | | 18.0 | | 17.0 | |
| MINERALS | | | | | | | | | | | |
| Calcium | % | 0.96 | | 0.87 | | 0.78 | | 0.74 | | 0.72 | |
| Available Phosphorus | % | 0.480 | | 0.435 | | 0.390 | | 0.370 | | 0.360 | |
| Magnesium | % | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | | 0.05 - 0.50 | |
| Sodium | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.20 | | 0.16 - 0.20 | | 0.16 - 0.20 | |
| Chloride | % | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | | 0.16 - 0.23 | |
| Potassium | % | 0.40 - 1.00 | | 0.40 - 0.90 | | 0.40 - 0.90 | | 0.40 - 0.90 | | 0.40 - 0.90 | |
| ADDED TRACE MINERALS PER KG | | | | | | | | | | | |
| Copper | mg | 16 | | 16 | | 16 | | 16 | | 16 | |
| Iodine | mg | 1.25 | | 1.25 | | 1.25 | | 1.25 | | 1.25 | |
| Iron | mg | 20 | | 20 | | 20 | | 20 | | 20 | |
| Manganese | mg | 120 | | 120 | | 120 | | 120 | | 120 | |
| Selenium | mg | 0.30 | | 0.30 | | 0.30 | | 0.30 | | 0.30 | |
| Zinc | mg | 110 | | 110 | | 110 | | 110 | | 110 | |
| ADDED VITAMINS PER KG | | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed | Wheat based feed | Maize based feed |
| Vitamin A | IU | 13,000 | 12,000 | 11,000 | 10,000 | 10,000 | 9000 | 10,000 | 9000 | 10,000 | 9000 |
| Vitamin D3 | IU | 5000 | 5000 | 4500 | 4500 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 |
| Vitamin E | IU | 80 | 80 | 65 | 65 | 55 | 55 | 55 | 55 | 55 | 55 |
| Vitamin K (Menadione) | mg | 3.2 | 3.2 | 3.0 | 3.0 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| Thiamin (B1) | mg | 3.2 | 3.2 | 2.5 | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| Riboflavin (B2) | mg | 8.6 | 8.6 | 6.5 | 6.5 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 |
| Niacin | mg | 60 | 65 | 55 | 60 | 40 | 45 | 40 | 45 | 40 | 45 |
| Pantothenic Acid | mg | 17 | 20 | 15 | 18 | 13 | 15 | 13 | 15 | 13 | 15 |
| Pyridoxine (B6) | mg | 5.4 | 4.3 | 4.3 | 3.2 | 3.2 | 2.2 | 3.2 | 2.2 | 3.2 | 2.2 |
| Biotin | mg | 0.30 | 0.22 | 0.25 | 0.18 | 0.20 | 0.15 | 0.20 | 0.15 | 0.20 | 0.15 |
| Folic Acid | mg | 2.20 | 2.20 | 1.90 | 1.90 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 | 1.60 |
| Vitamin B12 | mg | 0.017 | 0.017 | 0.017 | 0.017 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 |
| MINIMUM SPECIFICATION | | | | | | | | | | | |
| Choline per kg | mg | 1700 | | 1600 | | 1500 | | 1450 | | 1400 | |
| Linoleic Acid | % | 1.25 | | 1.20 | | 1.00 | | 1.00 | | 1.00 | |

Digest¹ = Digestible

Crude Protein² = Formulation priority is to meet the recommended minimum essential amino acid levels. These crude protein levels are not requirements *per se*, but instead are levels which will likely occur when achieving the aforementioned essential amino acid minimums.

NOTES: These feed specifications should be used as a guide. They require adjustment for local conditions and markets.

A withdrawal feed should be fed to meet local requirements for drug withdrawal times. This can be formulated to the same standards as the final feed listed above.

ROSS 308 AP BROILER: Nutrition Specifications

Notes

A series of horizontal dotted lines for taking notes.



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Every attempt has been made to ensure the accuracy and relevance of the information presented. However, Aviagen accepts no liability for the consequences of using the information for the management of chickens.

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