Avatec®

Technical Bulletin

Information from Phibro Technical Services

Considerations when Feeding Lasalocid to Broilers

Reasons for Lasalocid Usage

- The only divalent ionophore.
- Disrupts *Eimeria* by targeting primarily both Calcium (Ca^2)+ and Magnesium (Mg^2) pumps, blocking ion transport and causing broader disruption than monovalent ionophores.
- Less historical overuse compared with overused, monovalent ionophores.
- Favorable anticoccidial sensitivity profile, making it highly valuable in rotational, shuttle and bio-shuttle programs.

Recommended Usage Schedule

- **Dose Level**
  - Standard: 68-72 g/ton. (Approved use level 68-113 g/ton)
  - Adjust based on coccidial challenge. Utilize a higher end for severe exposure.
  - When coccidia vaccines are used, lasalocid is effective in the grower phase (14-35 days) as a bioshuttle (or hybrid) program.
- **Dietary Electrolyte Balance (DEB)**
  - Target: 172–240 mEq/kg of feed.
  - Formula: DEB = mEq (Na + K – Cl)
    - Example: Sodium (Na) 0.20%, Potassium (K) 0.68%, and Chloride (Cl) 0.20% → DEB = 204 mEq/kg.
  - Avoid abrupt phase changes greater than 20 mEq/kg.
  - DEB adjustments are not needed when using lasalocid at 68-81 g/ton unless the diets contain high sodium with other ionophores (e.g., monensin).
- **Nutrient Guidelines**
  - Sodium (Na) - Phytase contributes to ≈ 0.03% available Na.
    - Starter: 0.18–0.20%.
    - Grower: 0.18–0.20%.
    - Finisher: 0.20–0.22%.
  - Chloride (Cl): Target ≈ 120% of Na level.
  - Potassium (K): Keep below 0.90%. Watch for higher levels in all-vegetable diets, and when using DDGs or bakery products.
  - Avoid extremes in Na and Cl. Both impact feed intake, water intake, and performance.

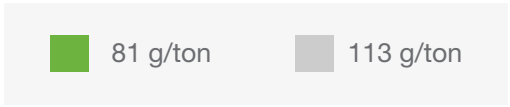
Research Findings*

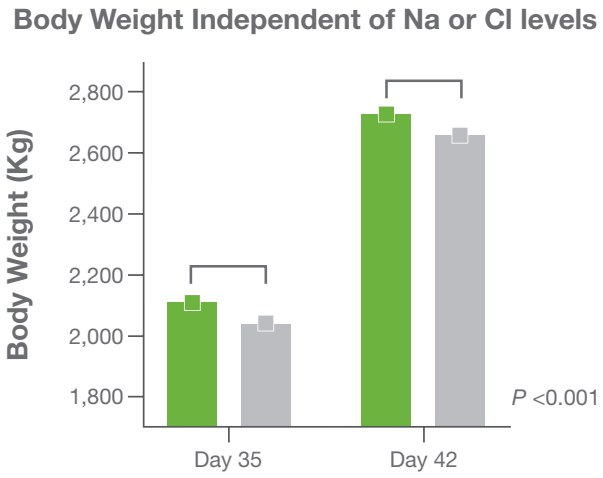
- A trial was conducted to evaluate the effects of different inclusion levels of lasalocid and varying sodium (Na) and chloride (Cl) levels on broiler performance (body weight and feed conversion ratio).
- Birds fed diets with varying sodium and chloride levels exhibited impacted FCR and BW when compared to birds fed diets containing lasalocid at 81 g/ton and 113 g/ton respectively. The Na:Cl ratio strongly influenced performance parameters of BW and FCR.
- The following Na:Cl ratio had a significant impact on performance, reducing FCR.
  - Low Na with -20% Cl of Na.
  - High Na with +20% Cl of Na.
  - Increasing Na paired with 20% Cl.
- The Na:Cl ratio impacted performance significantly with +20% Cl performing best.

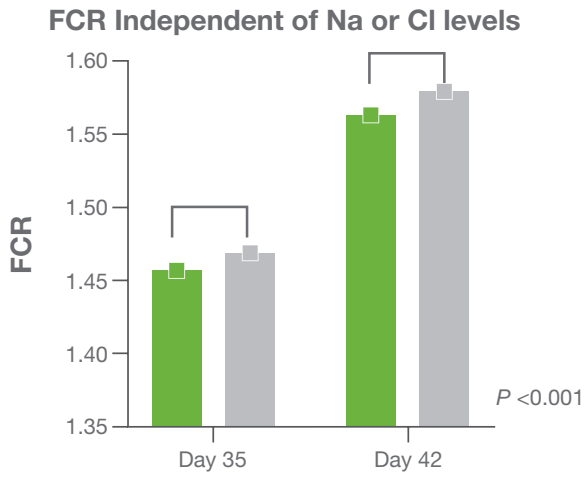
- At 28 and 42 d, birds fed high levels of lasalocid were significantly lighter ($P < 0.001$) with higher ($P < 0.005$) FCR than birds fed low levels. There was a Na by Cl interaction ($P < 0.001$) on FCR. At both high and low levels of Na, FCR was reduced when combined with high and low levels of Cl, respectively. When birds were fed high levels of Cl, increasing Na levels resulted in improved FCR. In conclusion, the lasalocid level most commonly used commercially (90 ppm or 81 g/ton) resulted in better performance than the higher level (125 ppm).

Examples of Lasalocid Feeding Strategies Proven in Commercial Broilers

- **Customer 1**
  - Grower diets: Na, reduced to 18%.
  - Finisher/withdrawal diets: Na restored to 0.22-0.23%.
- **Customer 2**
  - Lasalocid included in grower diets (21-32 days).
  - Lasalocid contributes ≈ 0.01-0.02% of Na, diet Na reduced accordingly.







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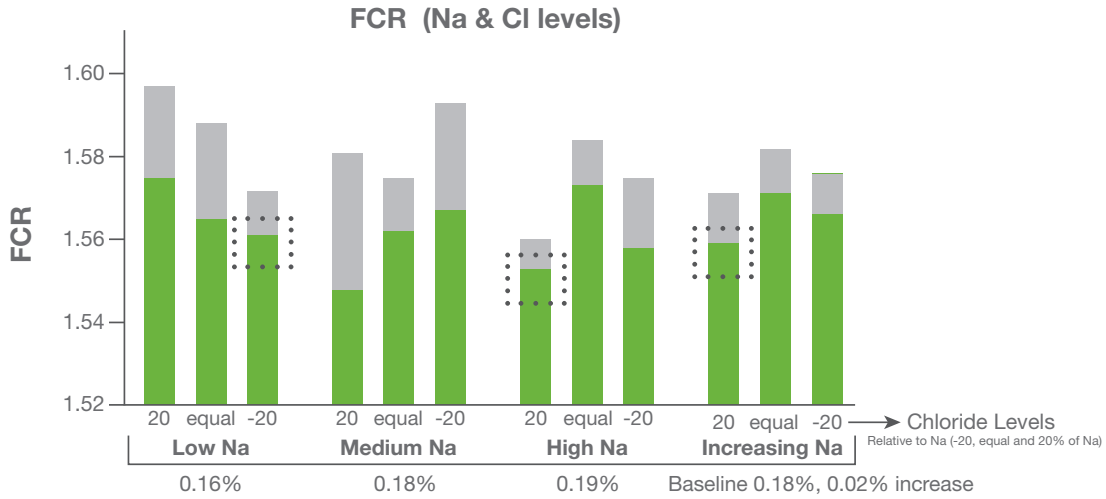

Conclusions

- Use 68 to 72 g/ton for reliable results that do not need special balancing of diets. Lasalocid has an approved use level of 68-113 g/ton
- Keep DEB within 172 to 240 mEq/kg.
- Maintain Cl to a level of approximately 20% higher than Na.
- No special Na balancing is needed unless combined with other Na-influencing additives.
- Consistent results achieved when:
  - Grower diets reduce Na to 0.18%.
  - Finisher diets restore Na to 0.22-0.23%.
  - Lasalocid contributes 0.01-0.02% Na in grower diets, with diet Na adjusted accordingly.
- Can be used in No Antibiotics Important to Human Medicine (NAIHM) and Conventional programs.

**Research trial data available upon request | Study on file #27-13-70AQO and ZTS Study #26-13-70AQO*

***To learn more about the medicated feed additive offerings from Phibro talk with an expert at** +1.800.677.4623.*

This information has been prepared for industry professionals