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WHAT IS A PROLAPSE?

Prolapse is primarily an early production issue and is generally observed before 30 weeks of age. It occurs when egg size increases faster than the hen's physical development. The resulting trauma of the cloacal tissue may lead to prolapse and subsequent mortality. Vent-related mortality in older hens is most often associated with vent pecking rather than true prolapse. Slow cloacal retraction following egg laying leaves the tissue exposed, increasing the risk of pecking by other hens. Reducing prolapse risk requires optimal pullet development, proper control of sexual maturity and careful management of egg weight at the start of production.

GENETIC POINT OF VIEW

A well-developed body frame at the onset of lay is essential to reduce the risk of prolapse. This development is strongly influenced by body weight during the first weeks of rearing. For this reason, our selection program is designed to encourage a natural frame development during the rearing period.

ORIGIN

Prolapse is mainly associated with insufficient frame development during rearing or inadequate body weight at sexual maturity. In such cases, the young hen produces eggs that are too large relative to her body size. Early light stimulation may further increase the risk by accelerating sexual maturity. Poor body weight uniformity can also contribute to prolapse, as lighter birds are generally more susceptible.

MEASURES TO BE DONE

- Assess the incidence of blood-stained eggs.
- Verify body weight targets throughout rearing and early production.
- Evaluate body weight uniformity until 30 weeks of age.
- Review the lighting program and stimulation practices.
- Monitor egg weight progression.

MANAGEMENT IMPACTS

Body weight at sexual maturity is a key factor in prolapse prevention. Birds with insufficient body weight are at greater risk of prolapse.

- Ensure body weight targets are achieved at the appropriate age.
- Adapt light stimulation according to flock body weight and maturity.

Frame development begins early and must be supported throughout the rearing period.

- Encourage early growth, particularly during the first seven weeks of rearing.
- Maintain excellent flock uniformity through appropriate feeding, housing, stocking density and lighting management.

Early light stimulation can significantly increase the risk of prolapse.

- Stimulate according to body weight, not age.
- If birds have not reached the target body weight, delay stimulation to allow sufficient physiological development before the onset of lay.

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In older flocks, prolapse is often confused with vent pecking. Excess abdominal fat can reduce muscle tone and tissue elasticity, resulting in slower cloacal retraction after oviposition. The exposed red tissue becomes highly attractive to flock mates, increasing the risk of vent pecking.

- Implement appropriate feeding management to maintain body weight uniformity and limit overweight birds.
- Reduce energy intake when necessary to prevent excessive fat deposition.
- Control feed intake in birds showing excessive consumption.
- In dark-house systems, where applicable, consider introducing a short dark period during the day, preferably after peak egg production. Improvement following this adjustment may indicate a vent pecking issue.

NUTRITIONAL IMPACTS

Investing in frame development during rearing is one of the most cost-effective ways to prevent prolapse and support long-term persistency.

- Maximize growth during the first 7 weeks by using a pre-starter and/or starter feed. Although these diets may be more expensive, feed efficiency is at its highest during this period.
- From 10 weeks of age onwards, lower-energy diets with higher fiber levels can promote crop and gizzard development, improving the birds' capacity to increase feed intake rapidly at the onset of lay.

At the onset of production, feed intake should never be restricted. Birds must complete their growth while simultaneously increasing egg production. Remember that adult body weight is only reached at approximately 30 weeks of age.

- Avoid limiting feed intake during this critical period.
- This stage represents the last opportunity to influence body weight and egg weight, both of which are key factors for good persistency.

Energy supply during the laying period should be adjusted according to body weight and body condition.

- Regularly assess body condition and fat reserves.
  - *Birds that are too fat indicate excessive energy intake and require corrective action.
  - *Insufficient reserves suggest that energy intake is too low.
- When transitioning from Layer 1 to Layer 2, 3, 4 or 5 diets, energy levels can be gradually reduced to limit excessive fat deposition, provided that all production indicators remain satisfactory.
  - *A gradual reduction of 20 to 25 kcal/kg at each step is generally recommended.

CONCLUSION

Prolapse prevention starts long before the first egg is laid. Once prolapse appears in a flock, corrective actions are limited. Therefore, investing in high-quality nutrition during early rearing and maintaining excellent flock uniformity are essential preventive measures. Prevention remains the most effective strategy for controlling prolapse.

To learn more about the causes, diagnosis and prevention of vent pecking, refer to the NOVOFocus "How to Prevent Vent Pecking".

For more details, please consult our website with the **nutrition guide**, all the **management guides**, and our **NovoCenter**.