



EMPTY FEEDER PRACTICE

The practice of empty feeder consists of encouraging pullets and laying hens to eat daily all the fine particles to attain an optimal Feed Intake (F.I.). This contrasts with the Ad Libitum practice where feed is always available. This practice is only recommended in young pullets, which means before 4 or 5 weeks of age. After this period and throughout the whole production cycle, empty feeder practice should be adopted. A good feed intake supports good production, a good egg weight and eggshell quality. The timing and duration of the empty feeder are also important factors to consider.

GENETIC POINT OF VIEW

We focus on selecting the most efficient birds with the best Feed Conversion Ratio (F.C.R.). While feed intake can sometimes be challenging, we aim to maintain a stable feed intake across different products ensuring consistency from one generation to another.

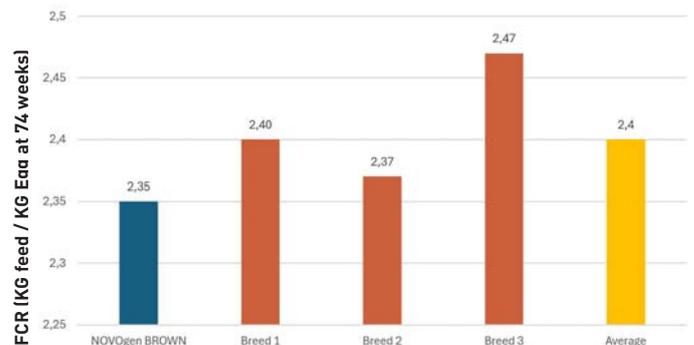
ORIGIN

The origin of this practice is to encourage pullets and laying hens to eat more, while ensuring that they eat a feed that is better balanced in nutrients. Laying hens tend to prefer larger particles, and if given the choice, they will avoid eating fine particles. However, the fine particles consist of the vitamins, microelements, minerals and many crucial nutrients to allow a high production. Proper management is key to ensuring that the birds consume both large and small particles, which is essential for maintaining consistent production and high-quality eggshells.

MEASURES TO BE DONE

- Feed Intake (F.I.) per hen/day, generally, hens consume about 40 % of their daily feed requirement in the morning, and about 60 % during afternoon. (Keshavarz, 1998)
- Water intake (quantity and timing)

External RST results - NOVOgen BROWN
Feed conversion ratio



- Timing of the empty feeder:
 - It should take place at midday, or during the hottest hours in tropical climates. It should never be done when the lights are turned on in the morning as this may interfere with the birds' natural early hunger. Additionally, it should be avoided at the end of the day, as this can negatively impact eggshell quality.
- Duration of the empty feeder:
 - 1 hour for the Leghorn lines (White eggs) is enough, more could sometimes mean a feed restriction
 - It could be 2 or 3 hours (more sometimes) for the Rhode Island lines (Brown eggs).



Feeding space recommendations in rearing

	From day old to 2 weeks	From 2 to 5 weeks	From 6 weeks to transfer
Starting feed pans	1 / 50 birds	-	
Linear chain feeders	2.5 cm / bird	4 cm / bird	6 cm / bird
Pan feeders	1 / 30 birds	1 / 25 birds	1 / 25 birds

MANAGEMENT IMPACTS

Empty feeder practice is strongly linked to the feeder's equipment:

- Chain feeder
 - The chain should run as fast as possible to avoid selective eating of large particles
 - Or could be run in dark period, in case of dark house
- Pan feeder
 - Management of feed height is more complicated than in chain. It's often link with the level at the end of the feeding line which the sensor in the last plate is located.
 - The feed level should be monitored strictly and should be adjusted more regularly compared to chain feeders.
- Cages Trolley
 - Ensure that all levels receive an equal amount and quality of feed. The top level is often neglected because it is harder to monitor.
 - Poor feed distribution can lead to a low B.W. uniformity, and occasionally cause birds' feed restriction.

Take care of house equipment per bird according to their age. Otherwise, competition could make it difficult to implement the empty feeder practice.

- High density increases competition for feeds, leading to, a poor body weight uniformity. Larger birds will always consume the bigger particles first, becoming too fatty, while smaller birds will not be able to finish the finer particles, resulting in feed restriction for them. Achieving empty feeder will be challenging.

Empty feeder practice should begin as soon as possible during the rearing period.

- Ideally at (5) weeks of age, if the B.W. is good, and a bit later in tough conditions (or in tropical area)

- Keep this practice until the culling age.
- Empty feeder means pullets or laying hens must finish all the feed by themselves, removing the feeds manually from the feeder is not recommended and is not considered as an empty feeder.

How many empty feeders per day? When?

- ONLY ONE, not more.
- At midday or beginning of the afternoon. Never when turning on the lights and at the end of the day.

To decrease competition for feed, use as less as possible number of feed distribution per day. Below an example of feeding schedule in rearing. In hot conditions, it is possible to use midnight lighting to give feed to the birds during the coolest hours of the day.

CONCLUSION

This practice is maybe the best tool to improve and achieve a good feed intake for all the laying strains. Unlike broilers, laying hens or pullets do not like to eat, so they need additional support. Even if for some farmers might believe that an empty feeder could mean birds will eat less, this is a misconception, and the opposite is true. A well-managed empty feeder allows reaching the best performances and profitability.

For more details, you can consult our web site with the nutrition guide & all the management guides, and our NovoCenter.

