

Limit Food Waste (Replace Used Equipment, Manage Meals Correctly)

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Limiting food waste to reduce the environmental footprint of your broiler farm

In slow-growing broiler production, minimising feed waste is essential to improve feed conversion ratio and reduce the environmental footprint of the meat produced. This relies on proper meal management and well-maintained, appropriate feeding equipment. Special attention is given to feed presentation, as well as the height and condition of the feeders, which should be easy to adjust and clean to prevent

losses. Replacing worn-out equipment, using feeder designs that limit waste, and implementing a daily emptying strategy by poultry allow for better control of feed intake. Monitoring the birds' weight also allows for more accurate feed distribution. These simple yet rigorous practices contribute to more efficient and environmentally friendly feeding.



Figure 1. Left image: Chickens feeding from Multibeck feeders. Right image: Feeders aligned on their designated support.

Example of a farmer's protocol to avoid food waste

Several feeder designs are made to prevent feed waste by stopping chicks from climbing into them (e.g., Multibeck by Le Roy-LLC, Plasson, Roxell, Tuffigo-Rapidex, Ska, Butterfly). For instance, Jean-Marie Caillaud, a Label Rouge chicken farmer with Fermiers d'Ancenis, has chosen Multibeck feeders from Le Roy-LLC for his poultry barns (Fig. 1). He adjusts the height of the feeders according to the birds' size to minimize feed waste. However, from around 37–38 days of age, when the risk of chickens stepping into the feeders is no longer a concern, he places them directly on the ground. During feed transitions, he completely empties the feeders before distributing the new feed. At the start of the batch, feed is provided ad libitum (with a 1 cm opening left), then from one month of age, he allows the feeders to empty once a day to give the chickens time to eat any spilled feed from the litter.



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Additional information on the protocol used by the farmer

During the first 8–10 days, the farmer manually distributes feed into the feeders three times a day—morning, noon, and evening—and walks through the poultry houses, helping the chicks get used to his presence. Upon the chicks' arrival and for up to 72 hours, water is also provided in small trays (Fig. 2), with the same number of trays as feeders. This water is given in addition to the drinkers, twice on the first day (morning and evening), then once a day before being removed.

To optimise feed intake monitoring and to better plan the appropriate amount of feed to distribute, the farmer has installed an automatic scale 12 meters from the entrance of each barn (Fig. 2). He checks the recorded weights on the control unit (Fig. 2) during his morning and evening rounds. It is important to clean the platform scales and reset the tare weight regularly.

Farmer's investment cost for feed management

To set up his feed distribution system in his two poultry barns (each 400 m², housing 4,400 chickens per barn with 3.5 flocks per year), the farmer chose second-hand equipment, allowing him to cut the initial cost by more than half. Instead of paying €9 per new feeder (without a cover), he purchased over 120 second-hand feeders at €4 each, including covers and extensions. He also reused his old connecting pipes, avoiding additional expenses.

For feed intake monitoring, he invested in a SODALEC BAT2 automatic scale for €2,000 (covering both barns). This practical choice of suitable and partly repurposed equipment helps limit investment costs while ensuring effective feed management. He estimates the payback period for his system at one year.



Figure 2. Top: Water trays used by the farmer. Bottom left: Photo of the automatic scale in use. Bottom right: Data recorded by the automatic scale.

Benefits of this system according to the farmer

Since implementing his feed management system, the farmer has observed the following improvements:

- 4–5 tons of feed saved per year (€400/ton)
- Easier adjustment and cleaning of the feeders, as they can be unscrewed, allowing for easy pressure washing
- Daily weight monitoring using the scale: enables adjusting the feeders to ration feed when necessary or, conversely, to increase the supply



For a video presentation of the Multibeck feeders (Leroy-LLC) used by the farmer, you can scan the QR code or follow the link below:

<https://www.le-roy.fr/nos-produits/alimentation-2/#videos>

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