

**Split-feeding  
broiler breeders  
for more  
sustainable chick  
production**

# Moving towards a more sustainable feeding system for broiler breeders



**Trouw Nutrition's new NutriOpt Split-feeding programme for broiler breeders offers farmers and producers major benefits as it improves hatching rates and welfare, reduces feed costs and supports sustainability**

Trouw Nutrition is introducing a more sustainable feeding system for broiler breeders. The NutriOpt Split-feeding system optimises broiler breeders' use of nutrients, thereby increasing the number of hatched eggs and chicks produced per hen. The feeding system also sets a higher standard of welfare for broiler breeders by decreasing their feeling of hunger, increasing satiety and reducing pecking activity.

**NutriOpt Split-feeding is tailored to the daily requirements for egg formation and the daily nutritional requirements of broiler breeders.**

Research shows that the nutrient requirements for laying hens vary throughout the day according to their circadian

rhythm, which is based on their physiological needs for egg formation. When laying hens are given a diet allowing them to self-select nutrients, they take in more protein and energy in the morning around the time when the egg is produced. The intake of calcium, on the other hand, is higher later in the day. This pattern suggests that hens use the energy, protein, calcium and phosphorus more efficiently by consuming these nutrients at periods of the day when their requirements are highest.

Broiler breeder hens are usually given restricted diets once a day, however. Increasingly, research is suggesting that this method is falling short in terms of achieving optimal nutrient use. Split feeding solves this problem by providing hens with different diets in the morning and afternoon. The morning feed delivers the nutrition for energy, protein and phosphorus for the egg-laying production. The afternoon feed meets the requirements for eggshell formation.

By supplying two feeds per day, farmers and producers can deliver a more precise supply of nutrients, tailored to the daily requirements for egg formation processes and the

hens' daily nutritional requirements. More efficient nutrient intake by hens improves eggshell quality, which increases the number of fertilised and hatched eggs. It also means more chicks can be produced per broiler breeder.

## A more sustainable production method

**NutriOpt Split-feeding cuts emissions and improves animal welfare**

NutriOpt Split-feeding is also a more sustainable production method. As broiler breeder hens consume fewer nutrients thanks to the system's efficiency, CO<sub>2</sub> emissions are cut by up to 10%. By extension, there is also less excretion of nutrients. All of these factors drive down the feed cost compared to a single-feed programme. NutriOpt Split-feeding also enhances the welfare of broiler breeders as it improves their feathering cover, reduces feelings of hunger and decreases pecking activity.

## Impact of NutriOpt add-on on business success

**Trouw Nutrition's NutriOpt add-on helps chick producers optimise feeding regimes**

The innovative NutriOpt add-on delivers integrated solutions for sustainable precision farming by giving producers direct access to Trouw Nutrition's expertise. The add-on helps producers design split-feeding regimens tailored to their regular feeding programme by automatically regulating feeds in the morning and afternoon. NutriOpt increases accuracy and predictability, simplifies the decision-making process for farmers, and drives down feed costs, which can account for as much as 70% of a producer's overall budget.

## Key benefits of NutriOpt Split-feeding for broiler breeders

NutriOpt Split-feeding brings broiler breeders closer to their voluntary feeding behaviour. This system's ability to address the physiological requirements of the breeder makes it a more efficient feeding programme, produces more profitable and sustainable eggs and chicks at a lower production cost, and improves the welfare of the hens.

Key benefits of NutriOpt Split-feeding for broiler breeders:

1

### Improves eggshell quality

- ▶ Increases thickness and breaking strength
- ▶ Maximises shell weight per unit surface area

2

### Improves animal welfare

- ▶ Improves the feathering cover
- ▶ Reduces feelings of hunger
- ▶ Reduces pecking activity

3

### Improves sustainability

- ▶ Reduces the excretion of nutrients
- ▶ Reduces CO2 emissions by up to 10%
- ▶ Reduces the intake of nutrients

4

### Reduces costs

- ▶ Feed cost reduction of 3%-7% per chick hatched
- ▶ €6/MT compound feed (according to ingredient market price variation)
- ▶ +3-9% gross margin/ hen (according to ingredient market price variation)

Technology being proprietary by Trouw Nutrition