

## Reducing antibiotic use: Case study from a poultry farm in the Netherlands

Josh Onyango, Livestock Health Consultant, Published on 19 July 2017

### Take home messages

- *Management measures at hatching and brooding can help prevent health and welfare challenges with decreased antibiotic usage in broiler production. This should include warming the floor to correct temperature between 28-29°C 24 hours before the first birds are hatched.*
- *Correct timing for vaccinations and keeping to the recommended protocols can help prevent outbreak of diseases such as Gumboro and other infectious diseases.*
- *On-farm biosecurity measures which should include correct disinfection of premises using government approved disinfectants will help keep poultry diseases at bay.*
- *Working very closely with your veterinarian is key to improved bird health and welfare which has an impact on antibiotic usage.*

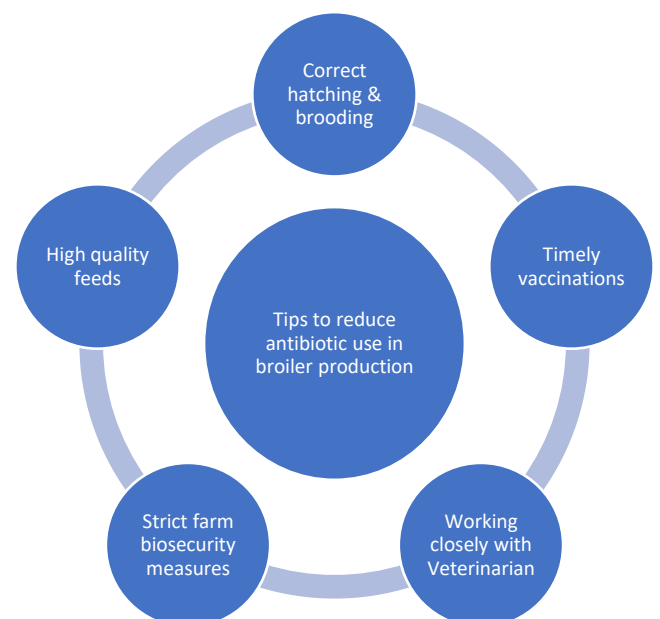
### Cutting back on antibiotic usage.

“Routine on farm management measures are key to successful reduction in antibiotic usage in meat producing birds,” Kees Koolen, Dutch poultry farmer said during a visit to his farm by Innovation for Agriculture in June 2017. Here we report on some of the key interventions Mr Koolen highlighted during the farm visit which slaughters’ 25,000 birds every 6 weeks with 7 flocks per year.

### Hatching and brooding

According to Mr Koolen the hatching of eggs is done at the farm in the last 3 days of the hatching process. The farm has adopted the use of an on-farm hatching system with an extract system raises the eggs to ensure the eggs are kept away from the floor. While this is happening, the floor is warmed to 20°C 24 hours prior to the hatching of the first birds, explains Mr Koolen. This ensures that the birds are hatched in a conducive environment which has a positive impact on their early life. Feed and water are also provided as soon as the birds have been hatched. He explains that early feeding helps with the production of saliva which has a link to sealing of the intestinal

wall, protecting the birds from gastrointestinal tract problems in the early days.



### ***Correct timing for vaccination***

The birds are vaccinated against Infectious Bronchitis at day 1 with a booster 2 weeks later. Other vaccinations carried out are New Castle Disease at day 18, and Gumboro Disease (Infectious Bursitis) at day 19 with both administered in drinking water. Prior to vaccination, he ensures that the watering system is clean which improves vaccine efficacy. The vet advises on when to vaccinate against Gumboro and also the farmer can check on the internet about early signs of Gumboro. Working and having a good relationship with the veterinarian is key explains Mr Koolen. He also explains that any problems with the birds always start at the hatchery/egg suppliers thus he ensures to work closer with the suppliers.

### ***Adequate biosecurity***

Use of clean clothing and boot change in every house are some of the biosecurity measures at Mr Koolen's farm. Visitors are provided with special clothing and footwear - plastic cover for shoes and overalls. Disinfection of premises is carried out after every batch of birds. The farm uses government approved products which include quaternary ammonia based disinfectants. Other products used are formaldehyde (only during the summer) while chlorine is mostly used in disinfecting floors.

### ***Getting the feeding right***

Feed quality is key explains Mr Koolen. The majority of feed suppliers understand the need for producing quality feeds. This has been achieved through pressure from Dutch farmers where suppliers who do not meet the quality requirements often have their products rejected. The impact of poor feed quality can be reflected on birds' growth rate and gastrointestinal challenges.

### ***Working very closely with the vet***

“Having a good working relationship with the vet is key to reducing antibiotic usage” explains Mr Koolen. This should happen not only when there are problems at the farm but also having frequent on farm flock health reviews with the vet.

“The solution is getting it right from the start” Mr Koolen concluded.

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