



健康
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Healthy
Livestock

AN OPTIMAL START FOR POULTRY

WP2 Resilience / Poultry / Peri-hatching environment



HEALTHY LIVESTOCK

Using antimicrobials in animals contributes to the rise and spread of antimicrobial resistance. By doing so it reduces the availability of safe and effective medicines against infectious diseases for both humans and animals. HealthyLivestock is a research project aiming to find ways to reduce the use of antimicrobials in livestock by improving the health and welfare of the animals.



RESILIENCE

One way to protect animals against infections is by strengthening their resilience. More resilient animals have a stronger defence mechanisms of their own. They are less susceptible to infections. The chances that they get sick and will need to be treated with antimicrobials will be less. Hence, stronger resilience leads to less antimicrobial use and by that to less antimicrobial resistance.



A GOOD START IN LIFE

To make a good start in life, it is essential that young hatchlings have rapid access to water and feed. The longer they remain deprived of these elementary needs, the bigger the repercussion on the animal's health and welfare appear to be. Also other aspects in early life, such as the environment and handling procedures may have an effect on health and welfare.



HEALTHYLIVESTOCK ON PERI-HATCHING ENVIRONMENT

In HealthyLivestock, we compared 3 different peri-hatching environments

- Hatchery Hatched (HH): delayed access to water and feed until the last one has hatched and all are transported to the broiler farm. Chickens need to be handled and processed at the hatchery and transported to the broiler farm.
- Hatchery Fed (HF): Immediate access to water and feed in the hatchery, but animals need to be processed at the hatchery and transported to the broiler farm.
- On-farm Hatching (OH): Fertile eggs are transported and hatched at the broiler farm, animals have immediate access to water and feed, processing and handling is nihil.



The EU part of the HealthyLivestock project is funded by the EU Horizon 2020 research and innovation program under grant agreement number 773436





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RESULTS FOUND IN CHICKENS OF YOUNG BREEDER FLOCK OFFSPRING

- Better growth performance in later life:
 - The OH and HF chickens had significantly higher body weights at day 1 of age.
 - OH and HF chickens showed improved chick quality and development at day 1 of age.
 - The OH and HF chickens had higher weights at slaughter age, on day 39.
- OH and HF chickens showed less foodpad dermatitis in later life.
- The mortality rate and FCR did not differ between HH, HF and OH.
- OH and HF chickens had worse wooden breast and white striping scores at slaughter age compared to HH chickens.
- No difference was found between HH, HF or OH in humoral response or disease resilience in later life
- The production costs calculated using the experimental data obtained in HealthyLivestock in Euro/kg appear to be around 4,5 % lower in the OH than for the HH system.

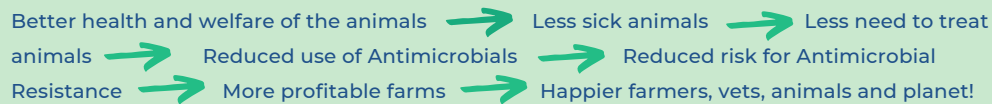


WHAT CAN YOU DO YOURSELF?

HealthyLivestock survey identified that from 200 farmers in 4 different EU countries, more than 65 % of the farmers found the system that allows immediate access to food and water useful and more than 65% would likely adopt it.

It is clear from our results and also previous studies that an early access to water and feed in combination with less early life stressors is beneficial for the animal's performance and welfare. An improvement in disease resilience was not found in our study It will be worthwhile to rethink your own husbandry process.

- Where is room for improvement in the current production process?
- What can be done under the current conditions to reduce the (average) interval between hatching and having access to water and feed and/or early life stressors?
- And what are the possibilities in case you are going to change your system?



If you want to know more about this topic **visit** <https://rebrand.ly/HealthPlansPoultry> or **scan** this QR code



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