Healthy Livestock

健康畜禽

ENRICHMENT : A WIN - WIN

WP2 Resilience / Pigs / Enrichment

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 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.

ENRICHMENT IN SWINE HOUSING

One of the critical conditions for achieving good animal welfare is the possibility for the animal to express its natural behaviour. For pigs, this means that they must have access to material they can manipulate. Some of the very good enrichment materials, such as straw, have the disadvantage of being incompatible with slatted floors. The HealthyLivestock project tested two alternative types of enrichment materials in pig housing: root vegetables and jute bags.

HEALTHYLIVESTOCK ON COMPARISON BARREN HOUSING VERSUS ENRICHED HOUSING

In a comparative study pig from the housing meeting the minimum EU legal requirements for enrichment and from the enriched housing systems were tested for their resilience against lung infections. The test model set up consisted of a multifactorial challenge model wherein pigs were infected with PRRSv (Porcine Reproductive and Respiratory Syndrome virus) and 8 days later with APP (Actinobacillus Pleuropneumoniae). Pigs from the enriched environment got significantly less lung lesions than the pigs from the barren houses.

In further study feed consumption, final body weight and Feed Conversion Rate (FCR) of pigs in housing with similarly contrasting enrichments were compared. Enrichment in the form of root vegetables and jute bags provided during both weaner and finisher stages resulted in less feed consumption, increased final body weight and improved FCR.

It also appeared that weaners from the more enriched environment had less ear lesions for two weeks post-weaning and also less body lesions during the finishing stage.

Looking at costs and benefits of using enrichment material it became evident that extra costs are well compensated by the lower FCR and better growth performance of the pigs in the enriched environments.

CONCLUSIONS

HealthyLivestock survey identified that from 600 farmers in 4 different EU countries, more than 32 % of the farmers found the innovation useful and more than 26% would likely adopt it.

The use of enrichment material like root vegetables and jute bags during the weaner and finisher stages of pig rearing leads to better growth rates, reduced costs, better animal welfare as for example with less ear and body lesions, better resilience and a reduced need to use of antimicrobials.

If you want to know more about this topic
visit https://rebrand.ly/EnrichmentPigs
Or **scan** this QR code

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