



# HyCare

We drive your hygiene



## Enhancing the efficacy of cleaning and disinfection at broiler farms

Lizzy Quirijnen, Stefan Verhoeven, Joost van den Borne  
*R&D Department, The Schippers Group, The Netherlands*

# HyCare: an integrative approach



1.  
Clean living  
environment



2.  
Pore-free  
surfaces



3.  
Pest-free shed



4.  
Optimal care



5.  
Clean drinking  
water

➤ **Mortality -0.02%, AMU -20%, FCR -0.06, condemnation -0.64%**

➤ **But...**



# Experiment and methods

## 1. Testing a novel semi-automatic device for cleaning of drinking and feeding equipment

- Treatment vs Reference
- Post-cleaning and post-disinfection
  - Organic contamination (ATP)
  - Aerobic cell count (CFU)

## 2. Testing effects of contact time and surface interaction on cleaning performance

- 0-5-10-20-30 min contact time for cleaning agent
- Post-cleaning and post-disinfection
  - Organic contamination (ATP) + Aerobic cell count (CFU)



# Results

## 1. Cleaning device for drinking and feeding equipment

- Ease of work; 52% less time, 39% less water
- Less organic contamination (189 vs 548 RLU)
- Lower aerobic cell count after cleaning ( $1.2$  vs  $7.5 \times 10^5$ )



## 2. Testing effects of contact time and surface interaction on cleaning performance

- Contamination reduced by 72% up to 20 min
- Cell count reduced by 65% after cleaning, and tended to reduce (-76%) after disinfection up to 30 min

