

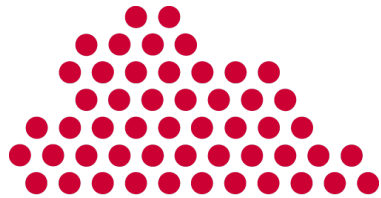


# Hatchery Talks

**Post-hatch feeding in  
relation to antibiotic  
reduction**

Antibiotic reduction

# Post-hatch feeding



Feed



Water



Light

•**Post-hatch feeding refers to the availability of feed, water and light for day-old chicks from the moment of hatching**

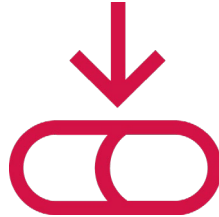


Post-hatch feeding

# Benefits



**Animal  
welfare**



**Antibiotics  
reduction**



**Field  
performance**

Post-hatch feeding promotes the development of robust day-old chicks and helps to reduce the need for antibiotics



Post-hatch feeding

# Antibiotic reduction

Disease Resistance  
High



Disease Pressure  
Low



Good Management  
Practice (GMP)



Good Hygiene  
Practice (GHP)

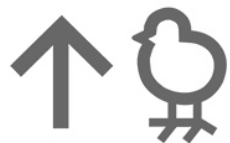


Post-hatch feeding

# Antibiotic reduction

Disease Resistance  
High

Disease Pressure  
Low



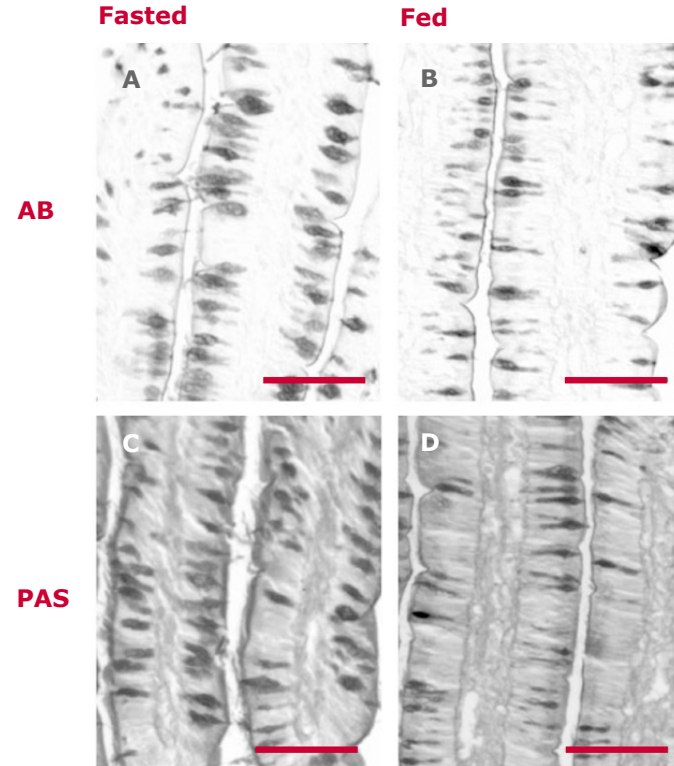
Good Management  
Practice (GMP)

Good Hygiene  
Practice (GHP)



# Intestinal development

- Intestinal development after hatch is stimulated by the presence of feed
- Delayed feed access (48h) leads to less developed villi



(Uni and Sklan 2003)



# Immunity

- **GALT (Gut Associated Lymphoid Tissue) represents 70% of the immune system**
- **Rapid development GALT, earlier immune maturation** (Friedman et al., 2003)
- **Delayed feeding reduces GALT activity first 2 weeks of life** (Bar-Shira et al., 2005)



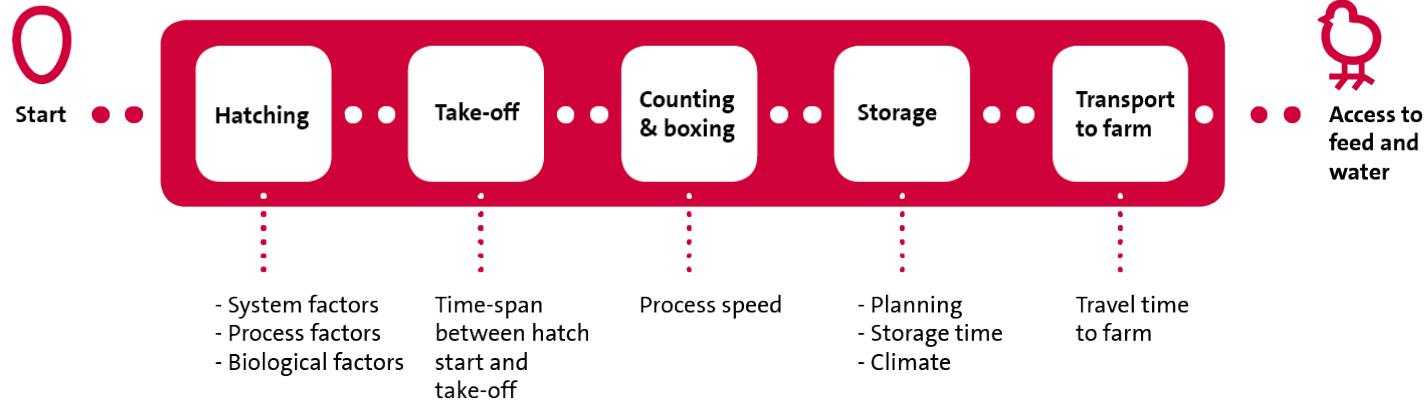
# Response to challenge

- **Higher BW and FI after coccidiosis vaccine challenge at 14 days (72h FD)** (Dibner et al., 1998)
- **Reduced clinical signs, better performance after non-infectious lung challenge at 4 weeks (72h FD)** (Simon et al., 2015)

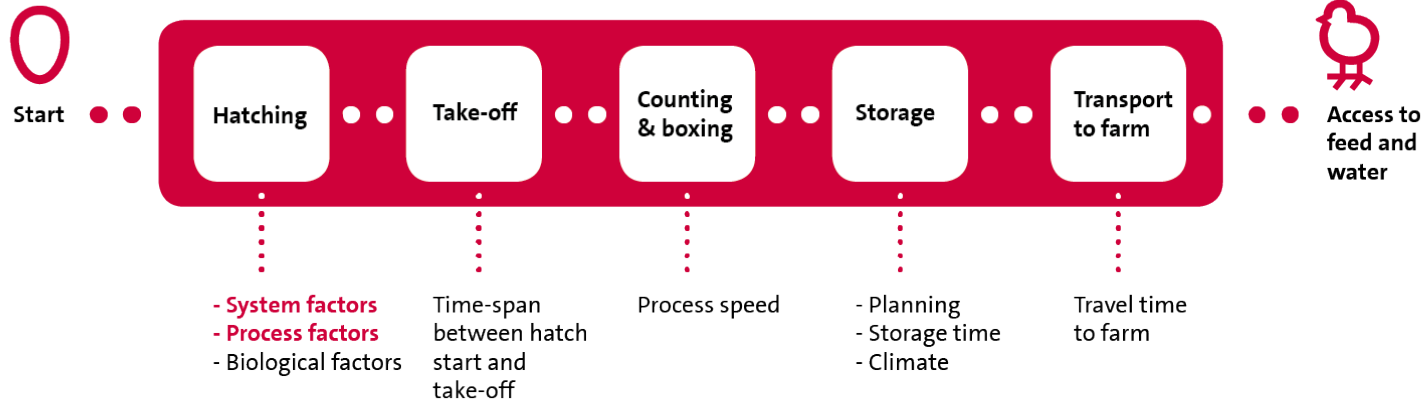




# Variables influencing effect post-hatch feeding

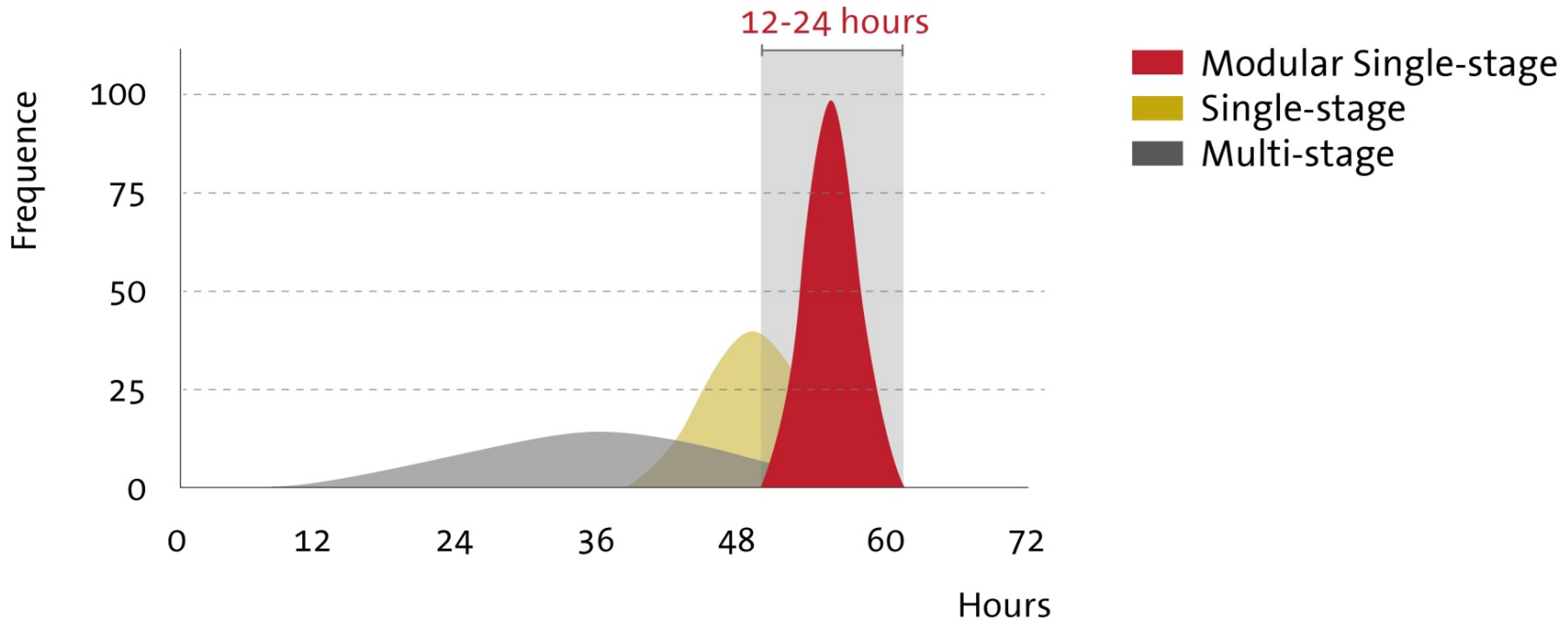


# Variables influencing effect post-hatch feeding

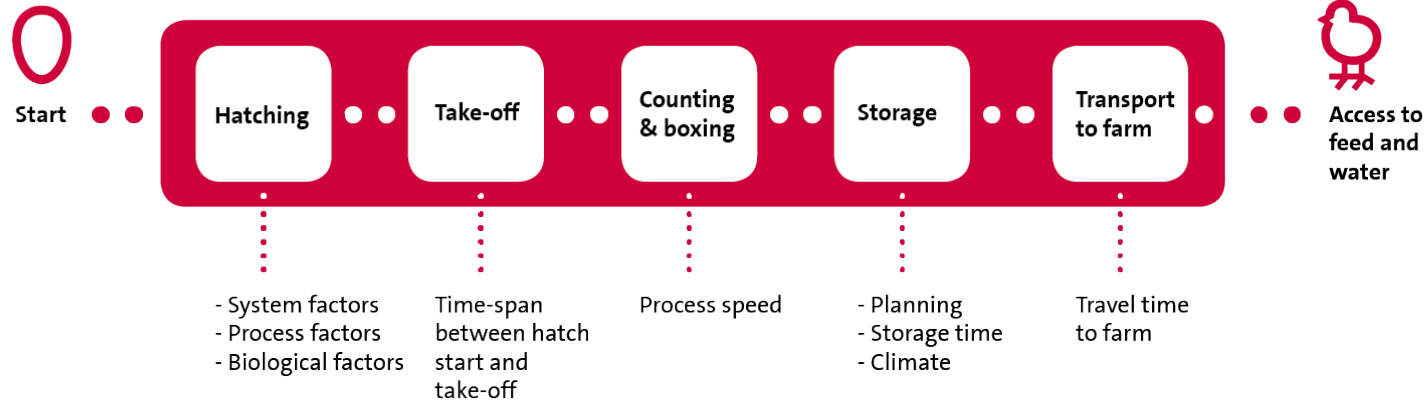


Post-hatch feeding

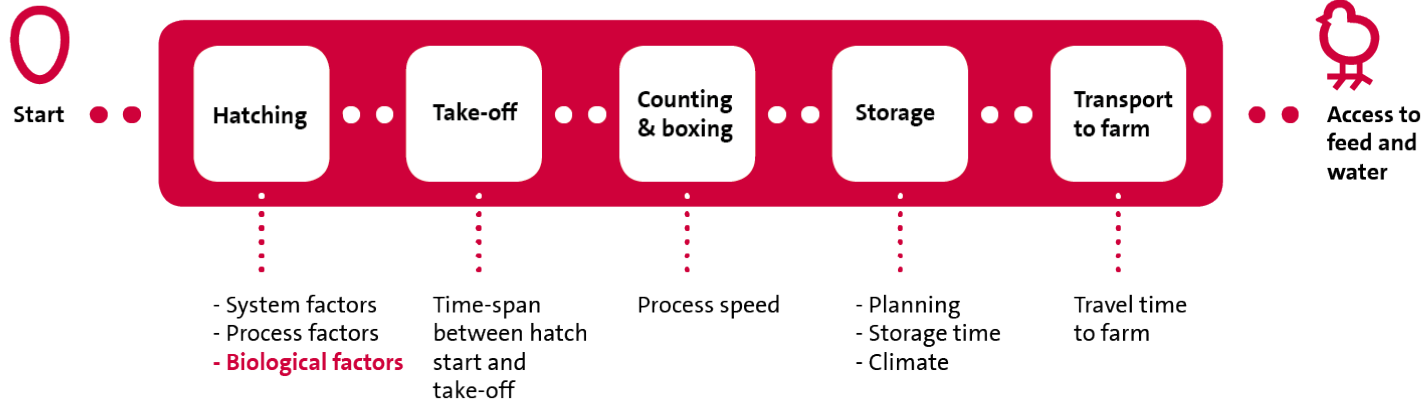
# Hatch window



# Variables influencing effect post-hatch feeding

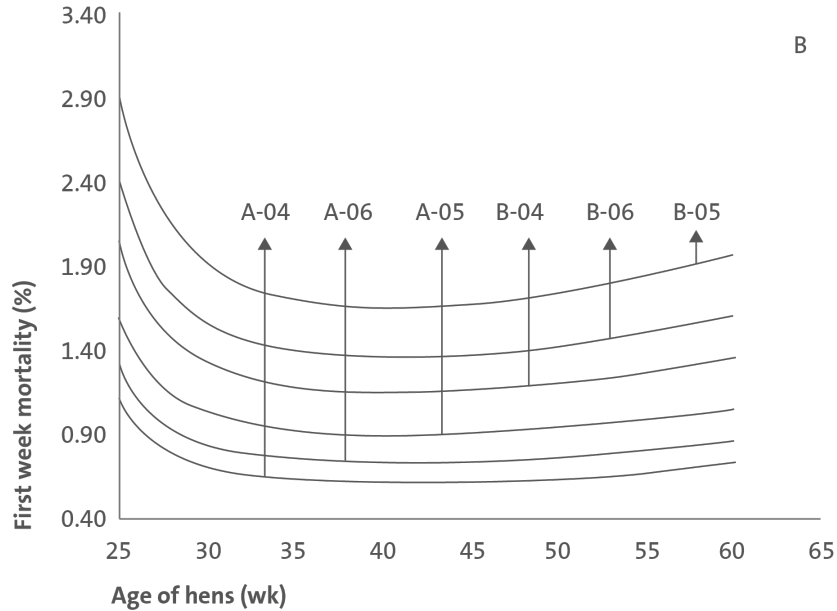


# Variables influencing effect post-hatch feeding



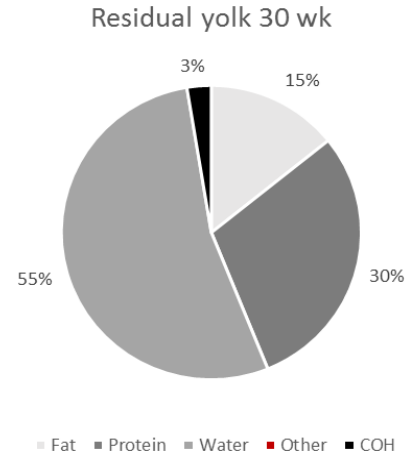
Post-hatch feeding

# Breeder age

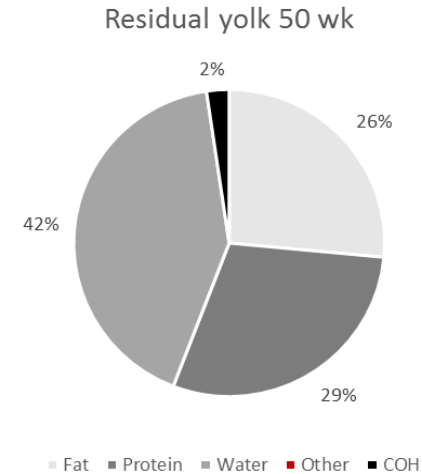


(Yassin et al., 2012)

B



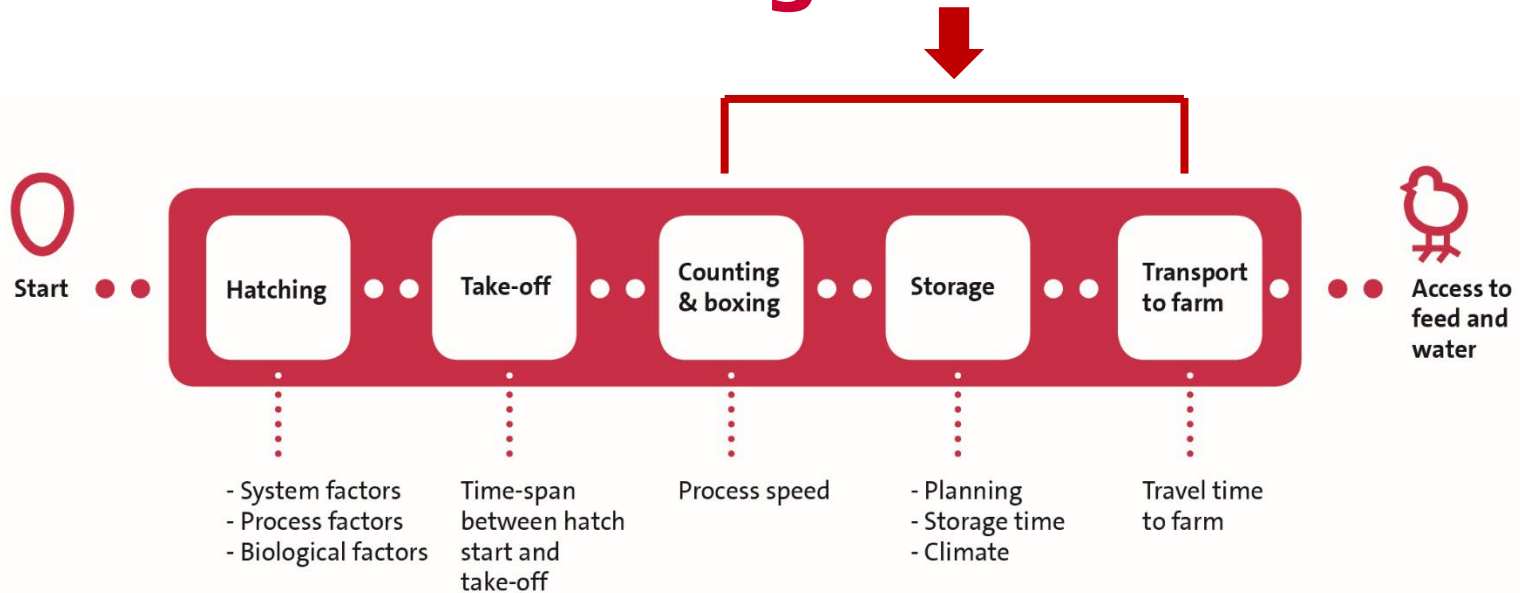
■ Fat ■ Protein ■ Water ■ Other ■ COH



■ Fat ■ Protein ■ Water ■ Other ■ COH

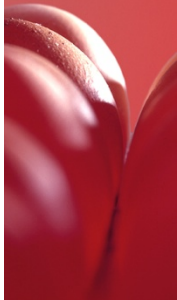


# Variables influencing effect post-hatch feeding



# Process and transportation

- **Chicks are in transition phase from poikilotherm to homeotherm**
- **Chicks are not able to regulate own body temperature**
- **Feed intake improves thermoregulation** (van den Brand et al., 2010)
- **Chicks are better able to resist cold stress**



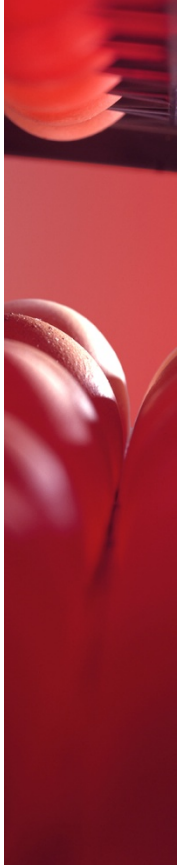


Post-hatch feeding

# Field results



- **Significant reduction 7-day mortality**
- **Highest reduction in chicks from young breeders**
- **Overall improved feed conversion ratio**
- **Chicks are quiet and relaxed in hatcher, processing and arrival farm**





# Post-hatch feeding in relation to antibiotic reduction

## Summary

Post-hatch feeding

# Antibiotic reduction

Disease Resistance  
High



Disease Pressure  
Low



Good Management  
Practice (GMP)



Good Hygiene  
Practice (GHP)



# Thanks for watching!

- Knowledge section at our website

See you at our next webinar!

