

Innovations in and around the hatchery

孵化室的创新

Sander.lourens@wur.nl

www.hatchability.com



LIVESTOCK RESEARCH
WAGENINGEN UR

Innovations in and around the hatchery

孵化室的创新

- Pre-storage heating of hatching eggs
- 前期储存时，为待孵化的鸡蛋预先供热
- Incubation and chick quality: eggshell temperature
- 孵化与雏鸡质量：蛋壳温度
- Care for young chicks 雏鸡的养护
 - Hatchbrood and Hatchcare (Hatchtech) 孵化与养护（孵化技术）
 - Patio and X-treck (Vencomatic) 创造最佳收益的系统



LIVESTOCK RESEARCH
WAGENINGEN UR

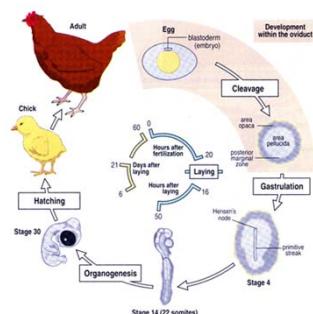


Embryo vitality in long stored eggs 存储期较长鸡蛋的胚胎活性

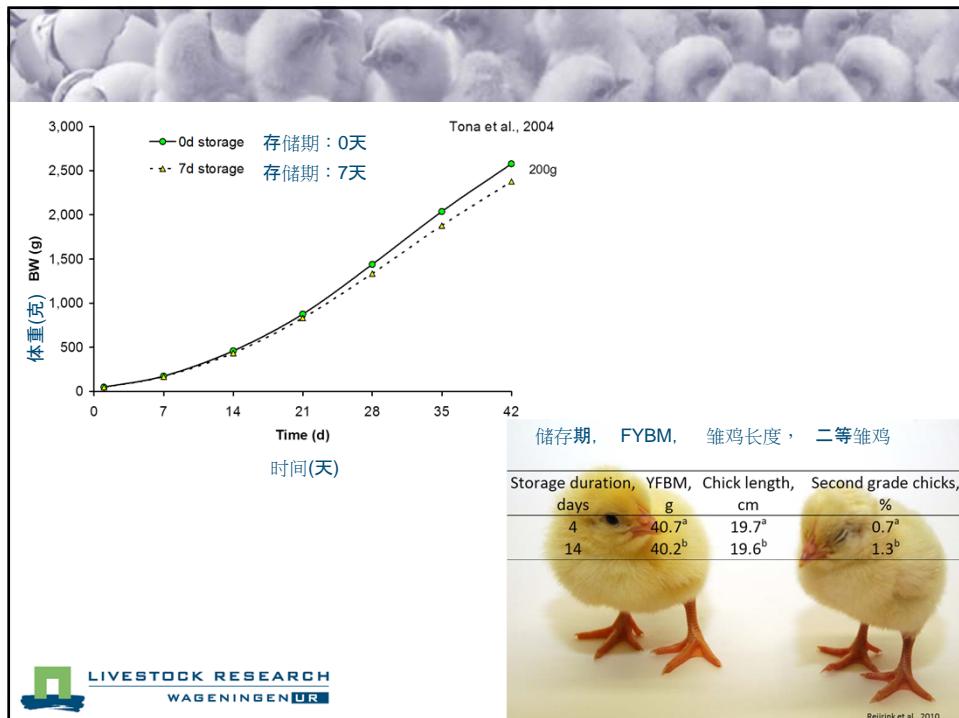
To survive storage, the embryo needs a certain degree of development (Fasenko et al., 2001):

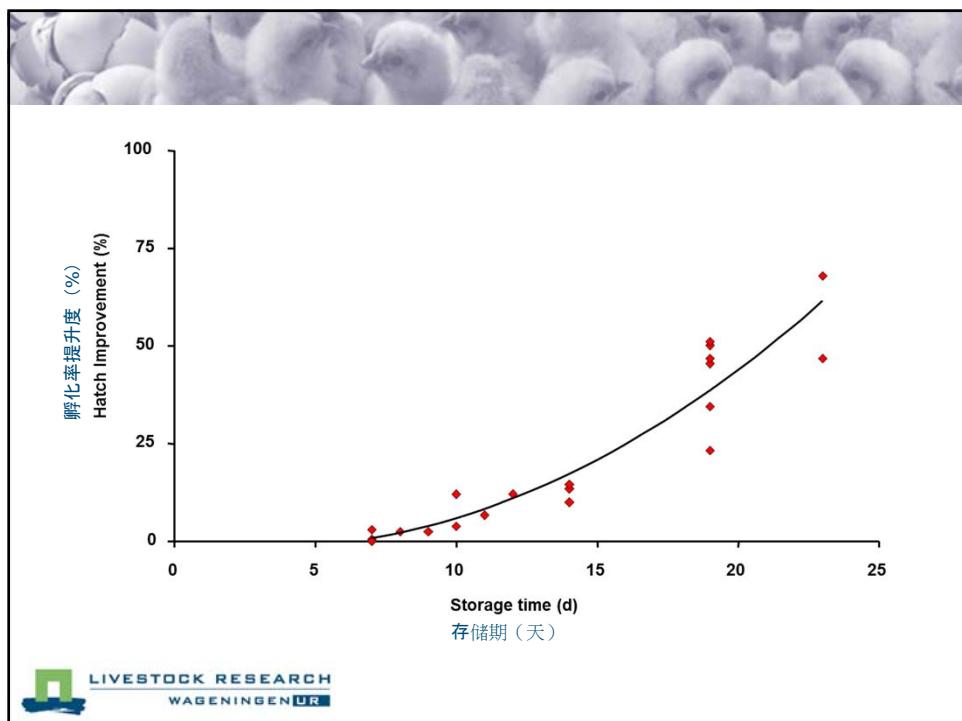
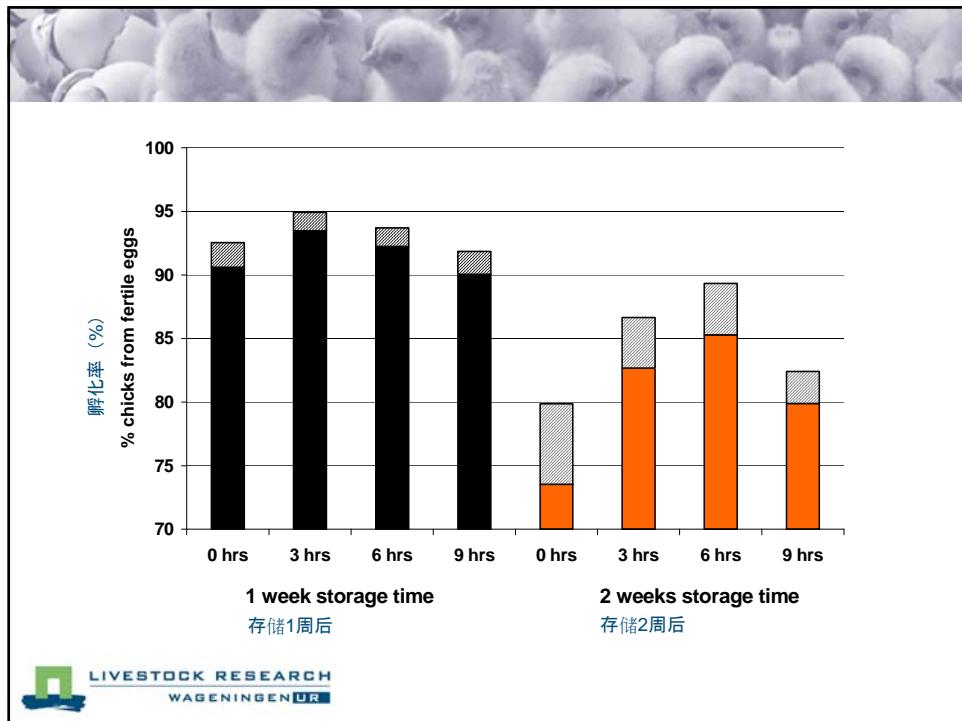
胚胎需要一定的发育时期

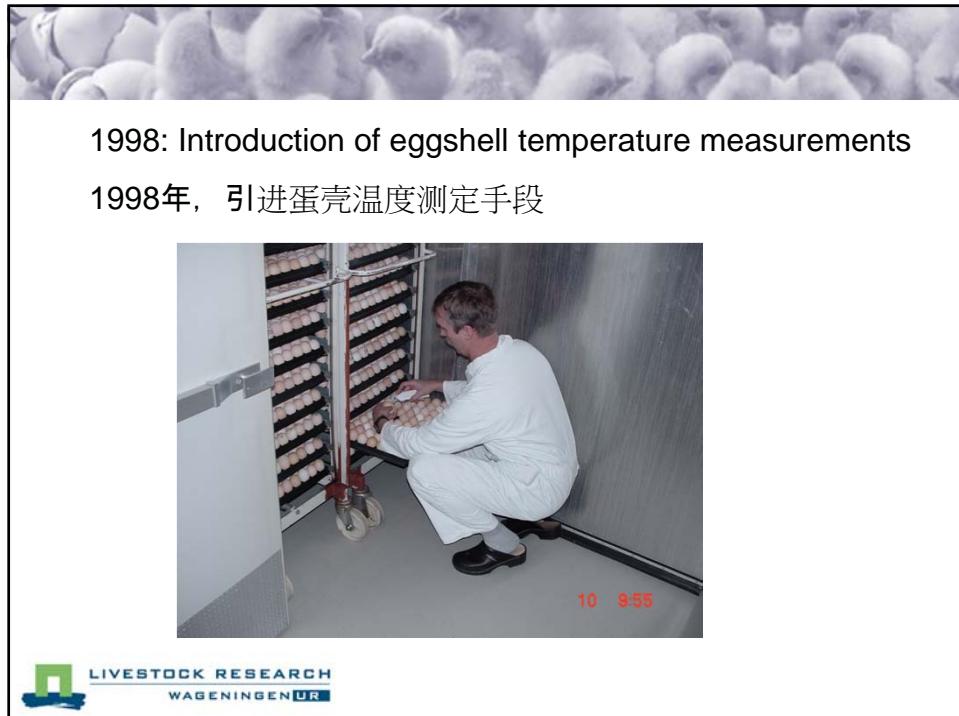
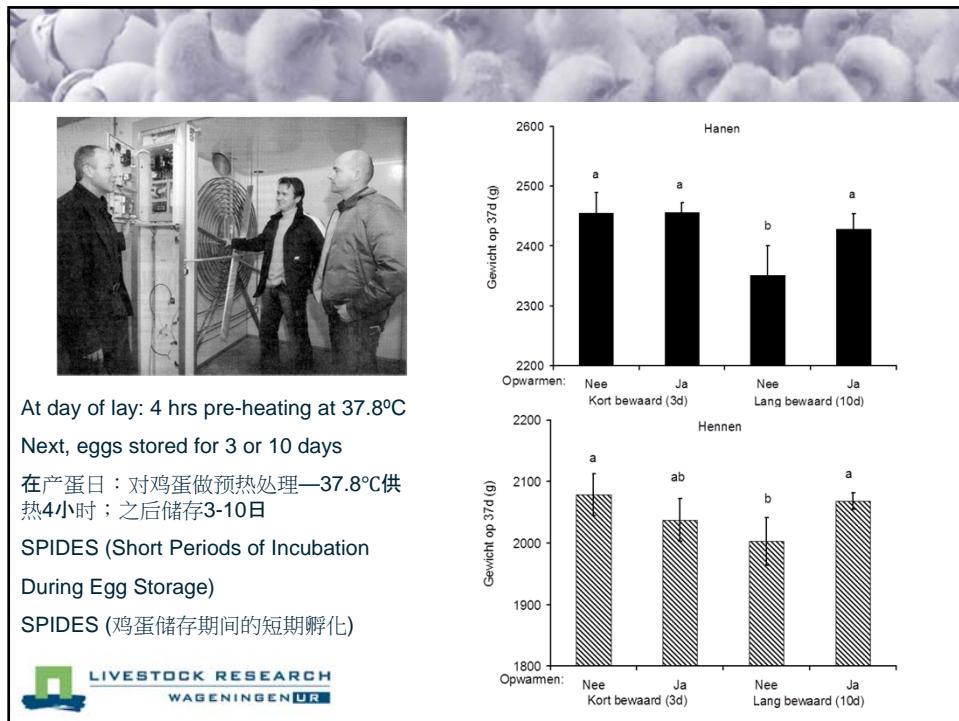
- 2- layer stage (60.000 – 80.000 cells; stage X)
- 第二个发育期 (60000 – 80000个体细胞的阶段：阶段X)
- 3 – 6 hrs of pre-heating at incubation temperature BEFORE storage
- 鸡蛋送存储前先进行3-6小时的预供热
- This technique would increase embryo vitality
- 该技术会提高胚胎活力
 - small scale trial 小规模实验
 - large scale field trials 大规模实地测试
 - broiler breeder experiment 肉鸡种鸡实验

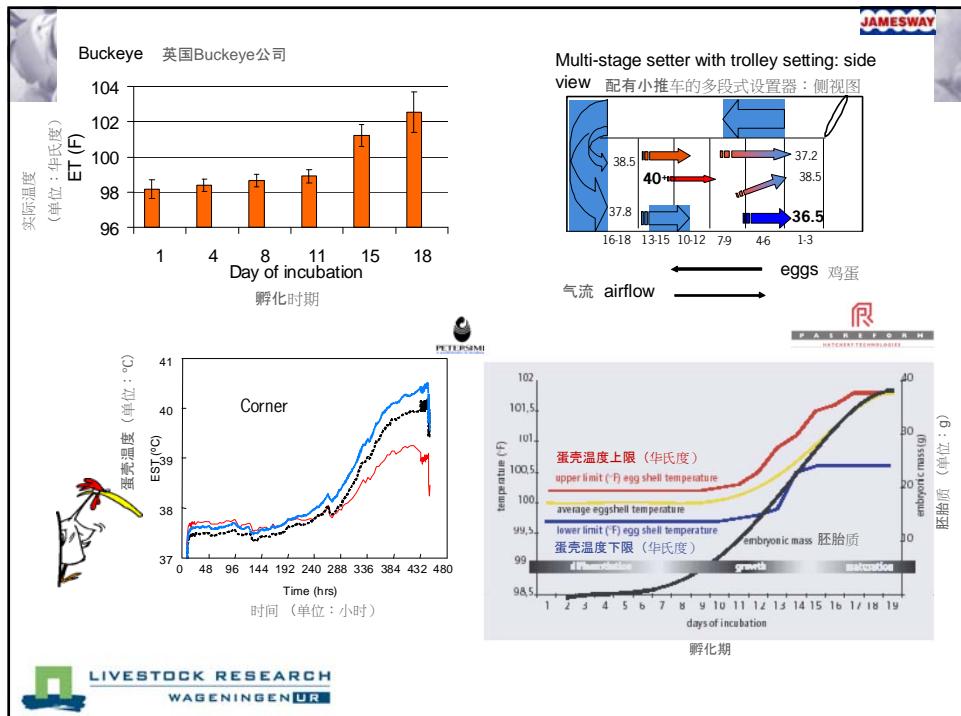


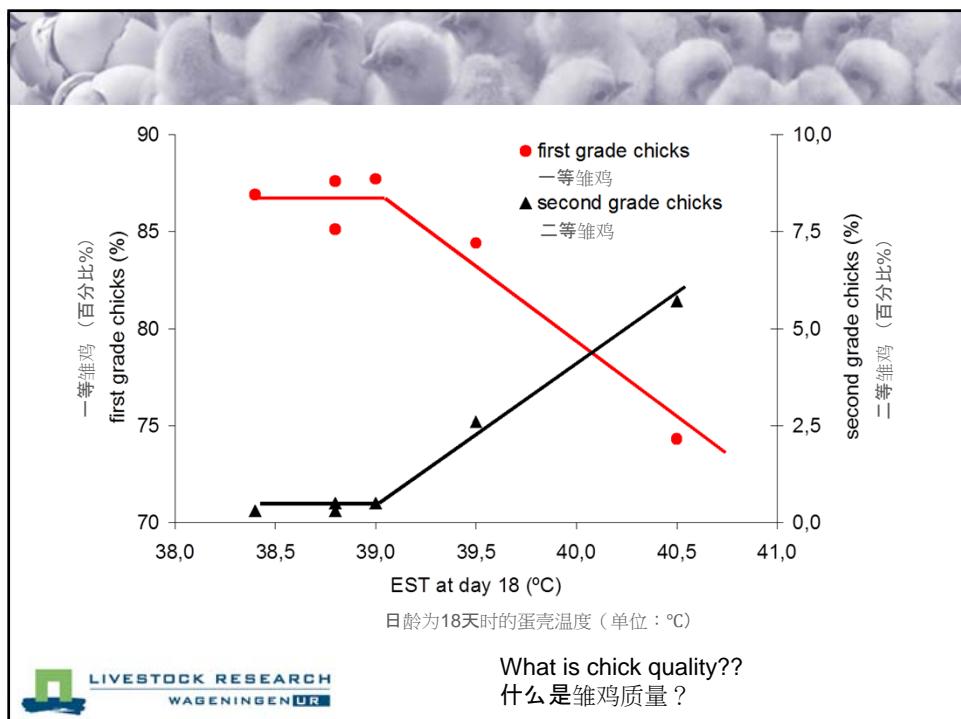
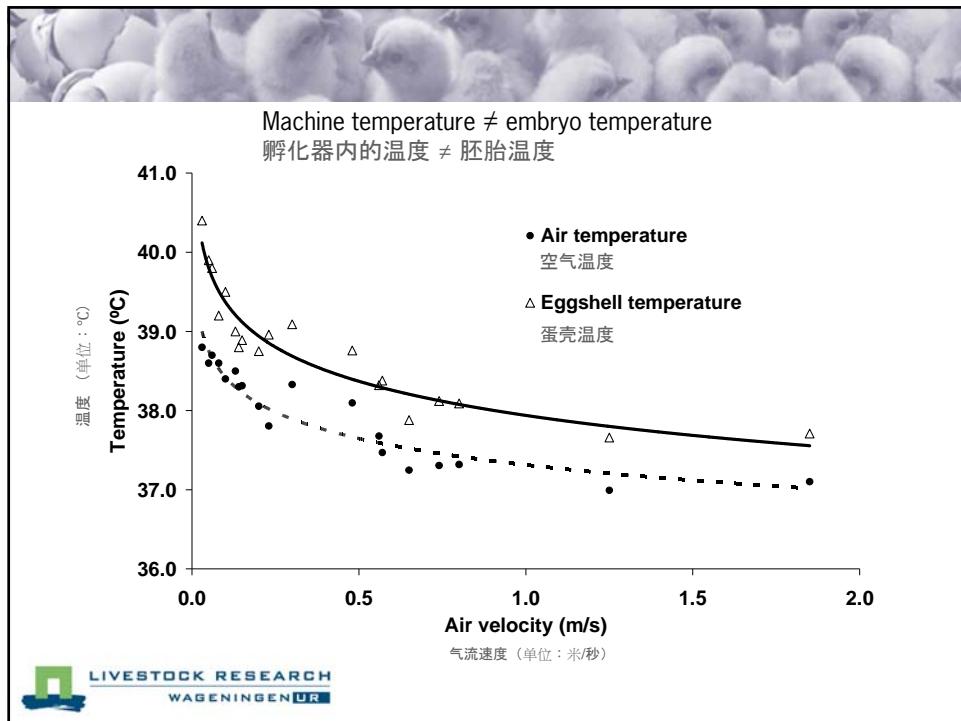


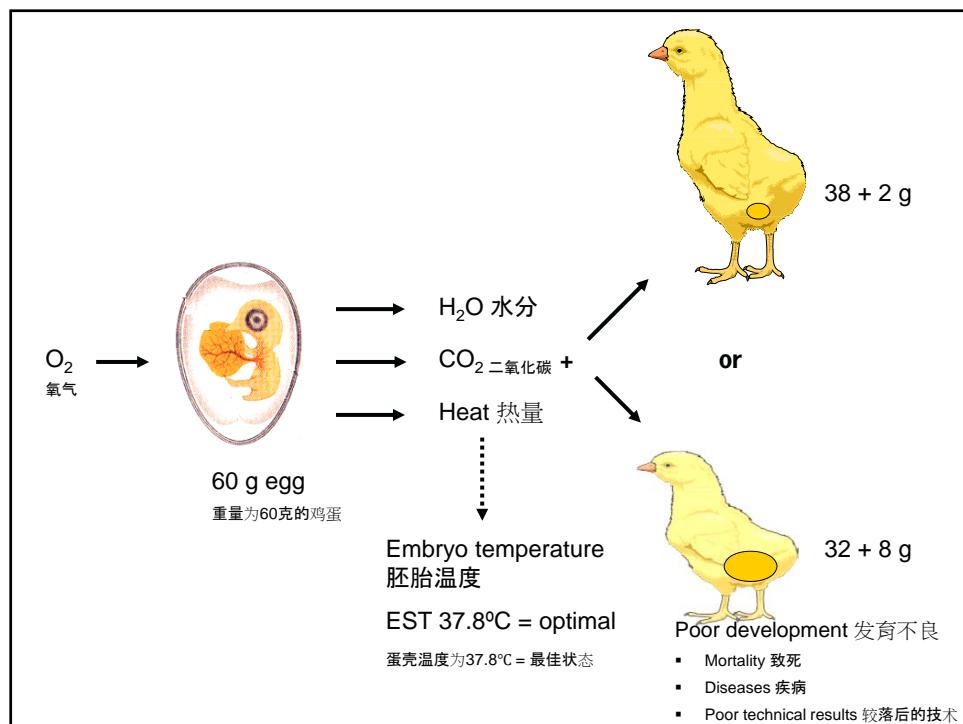
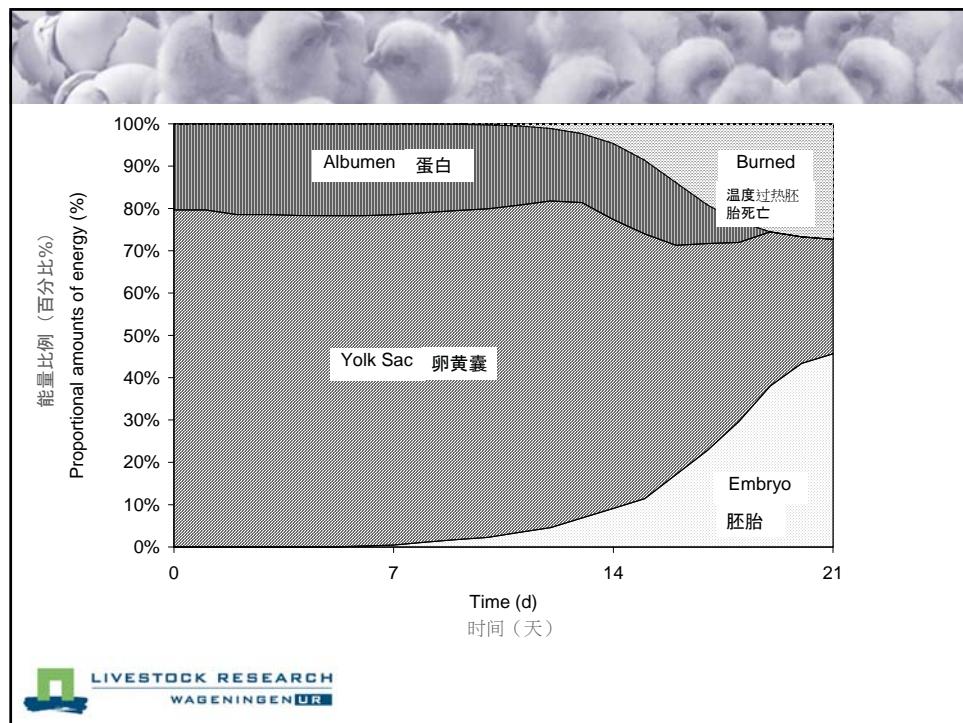






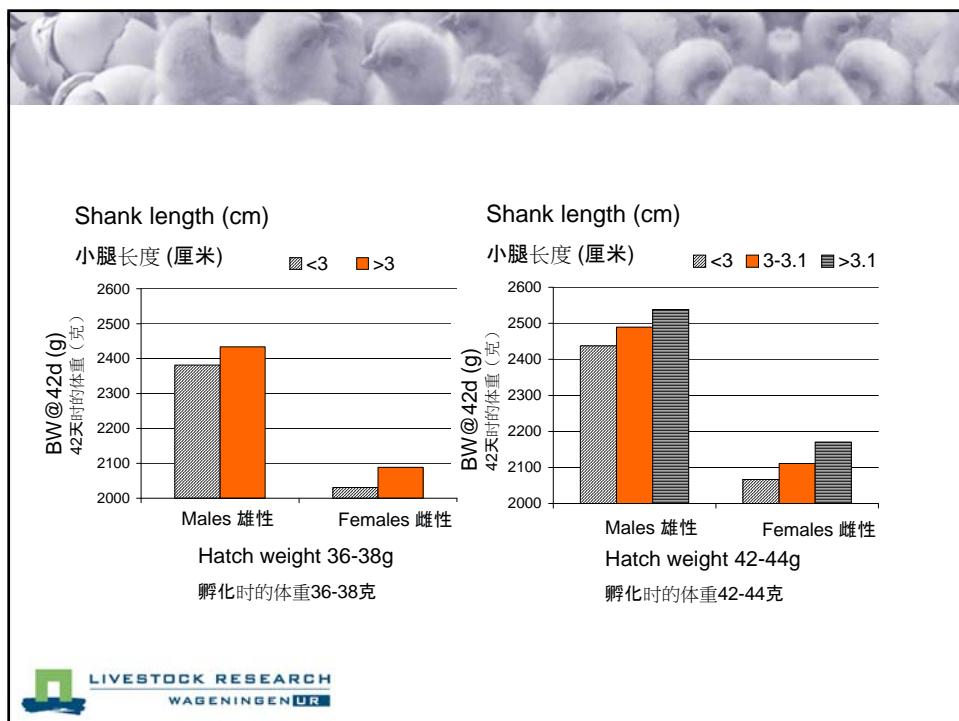


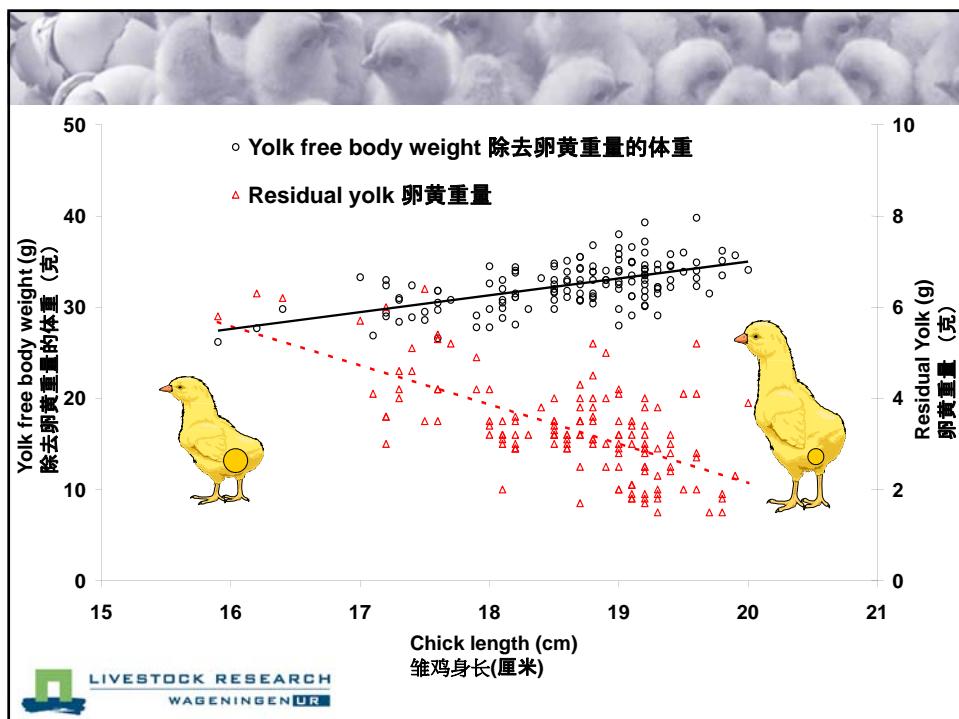


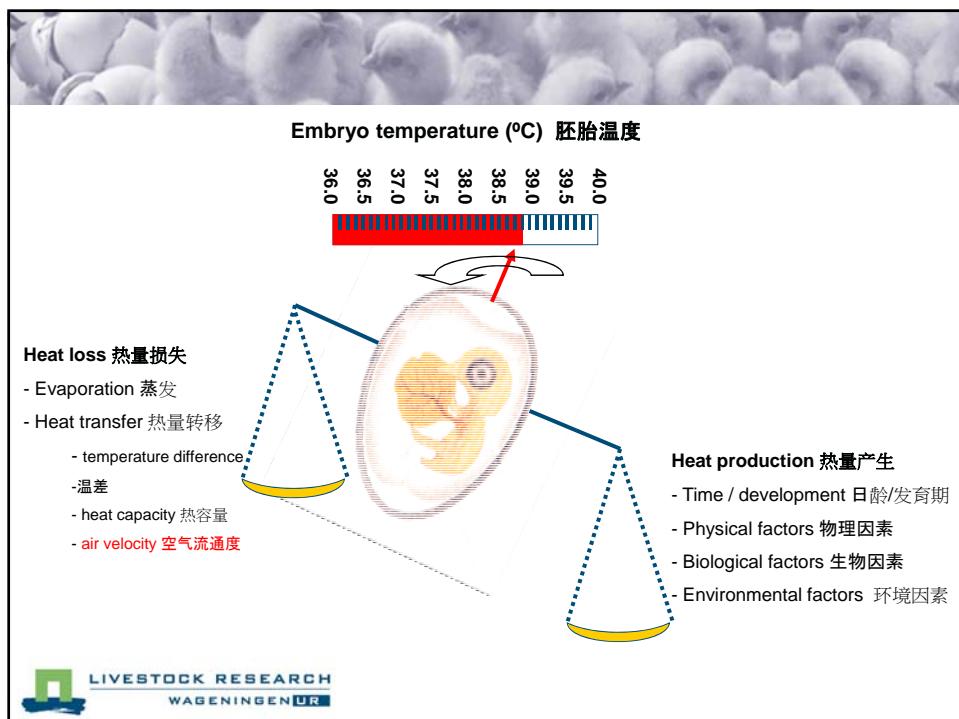


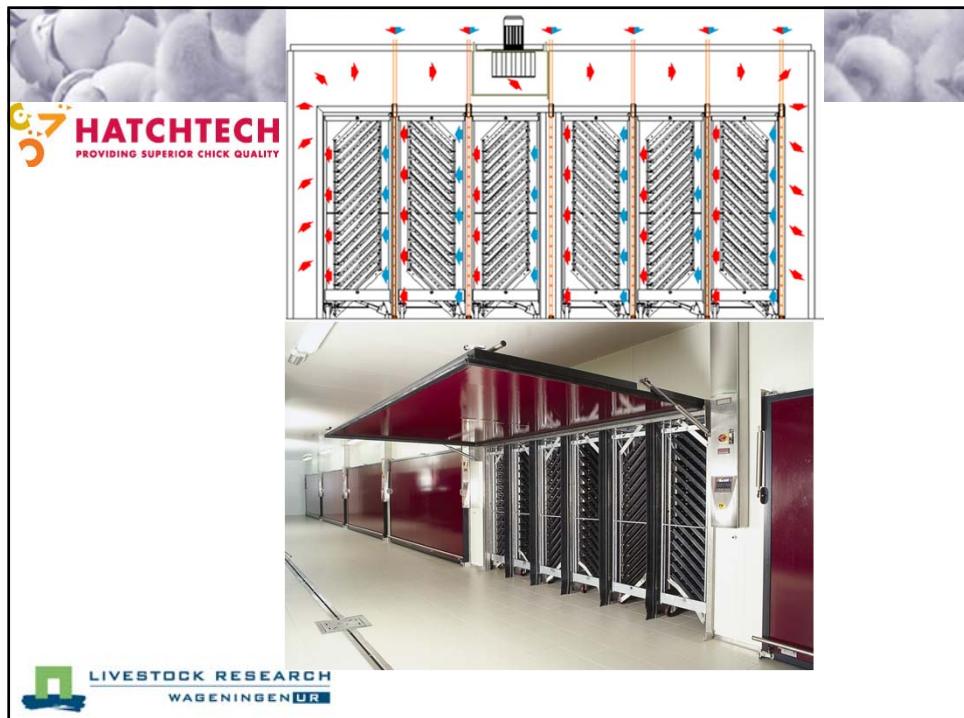
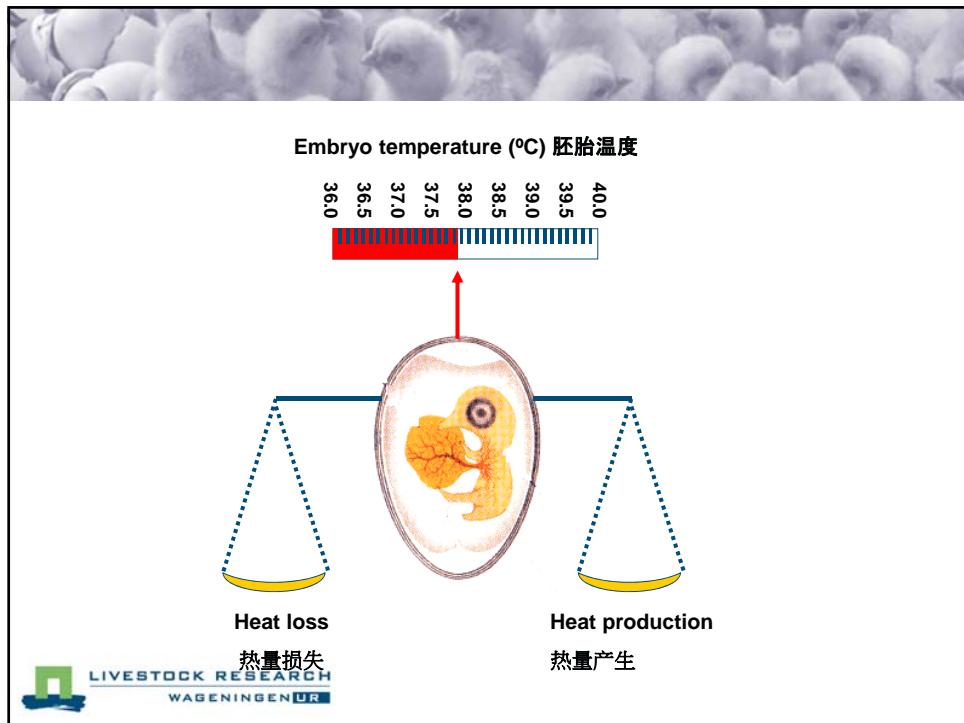
Shank length and broiler performance
肉鸡的孵化表现：以胫骨长度为例

LIVESTOCK RESEARCH
WAGENINGEN UR







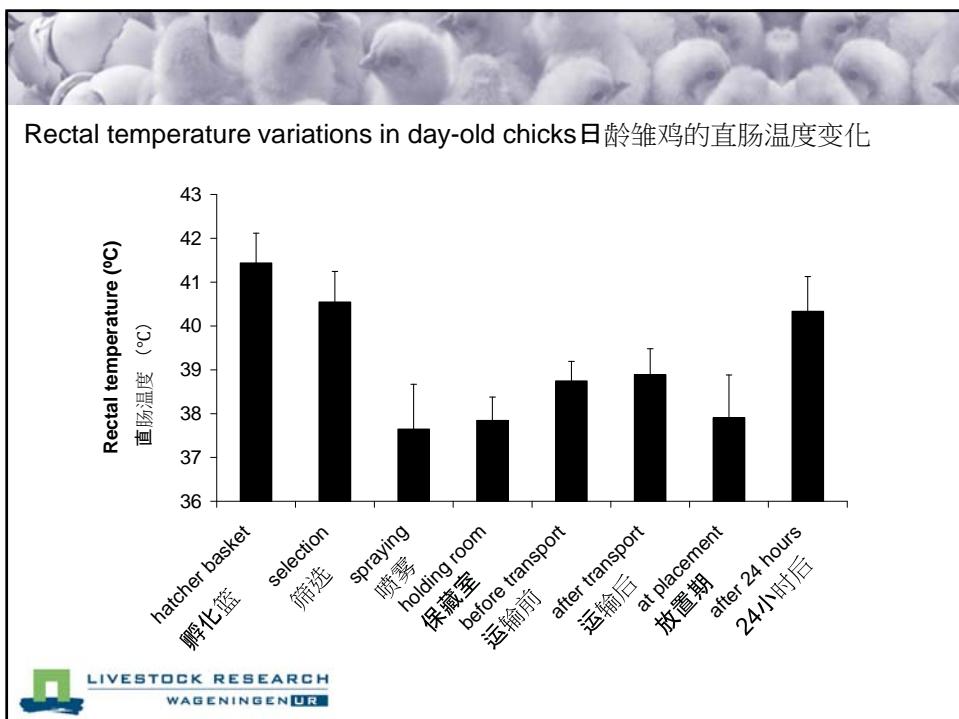


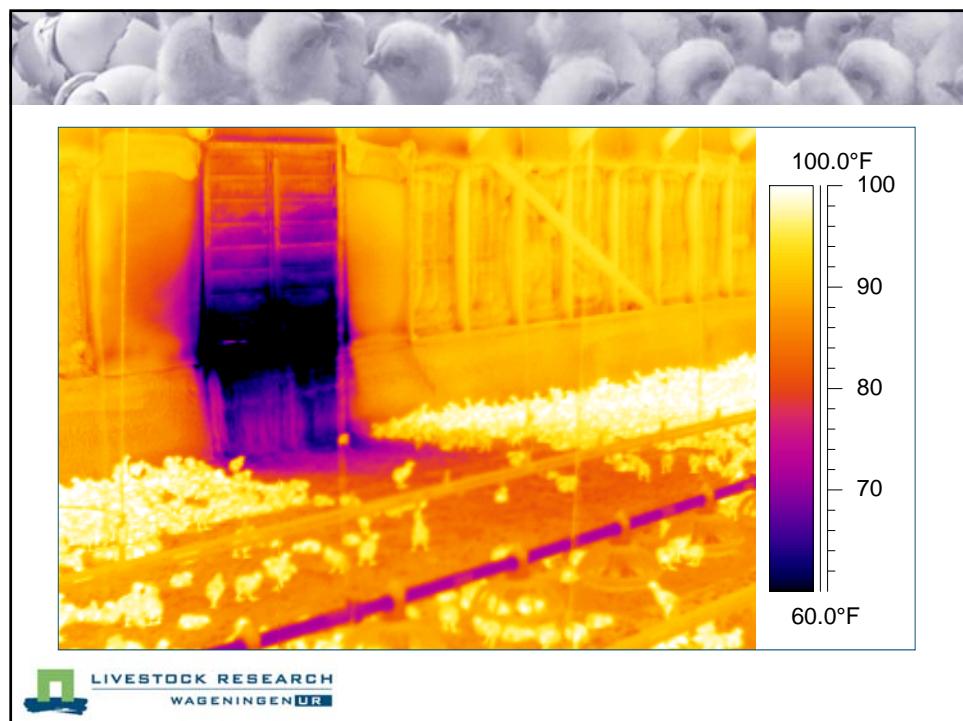
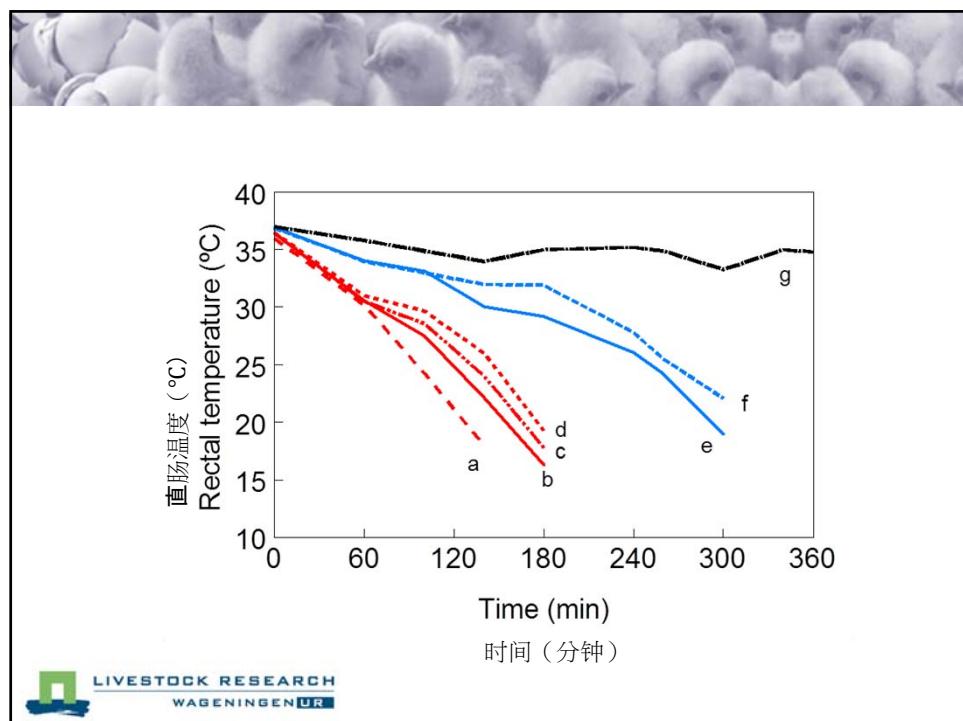


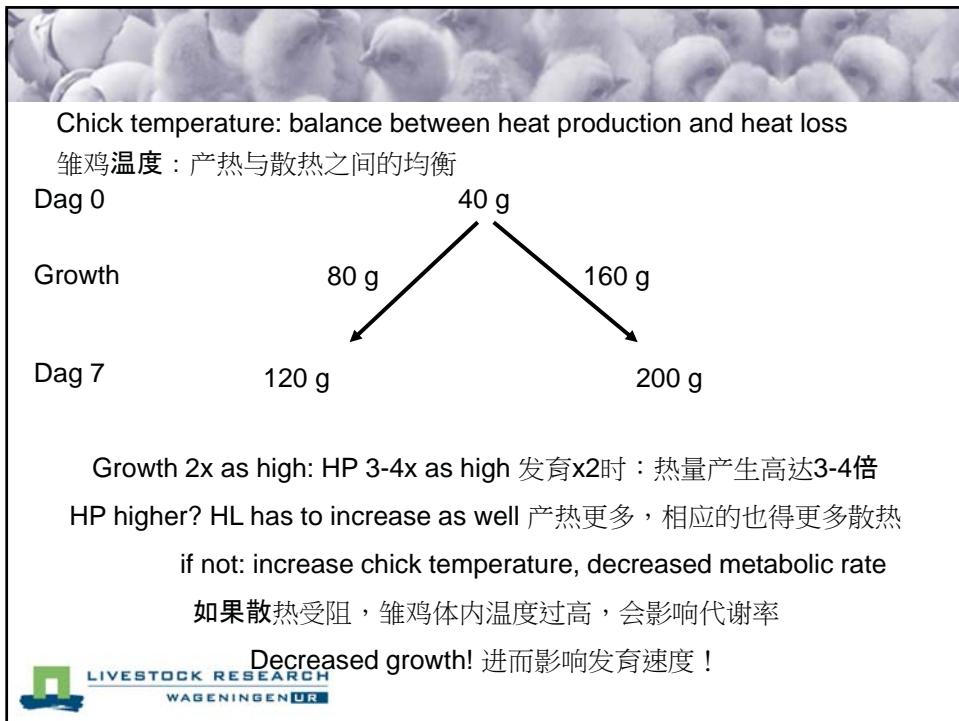


Good quality chicks: what next??

LIVESTOCK RESEARCH
WAGENINGEN UR







28/07/2017

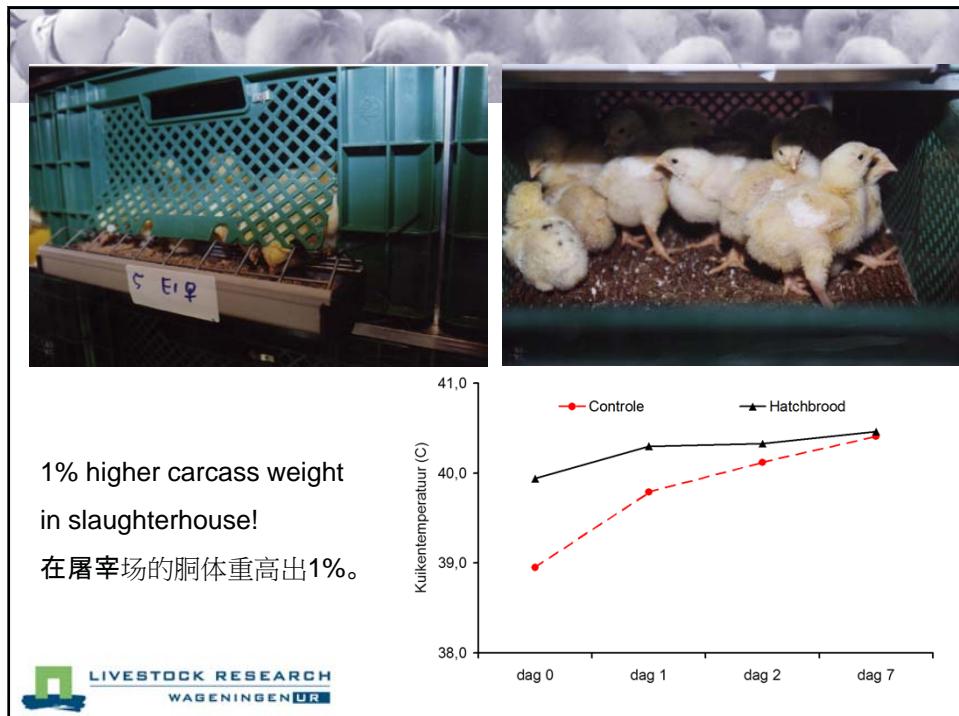


LIVESTOCK RESEARCH
WAGENINGEN UR



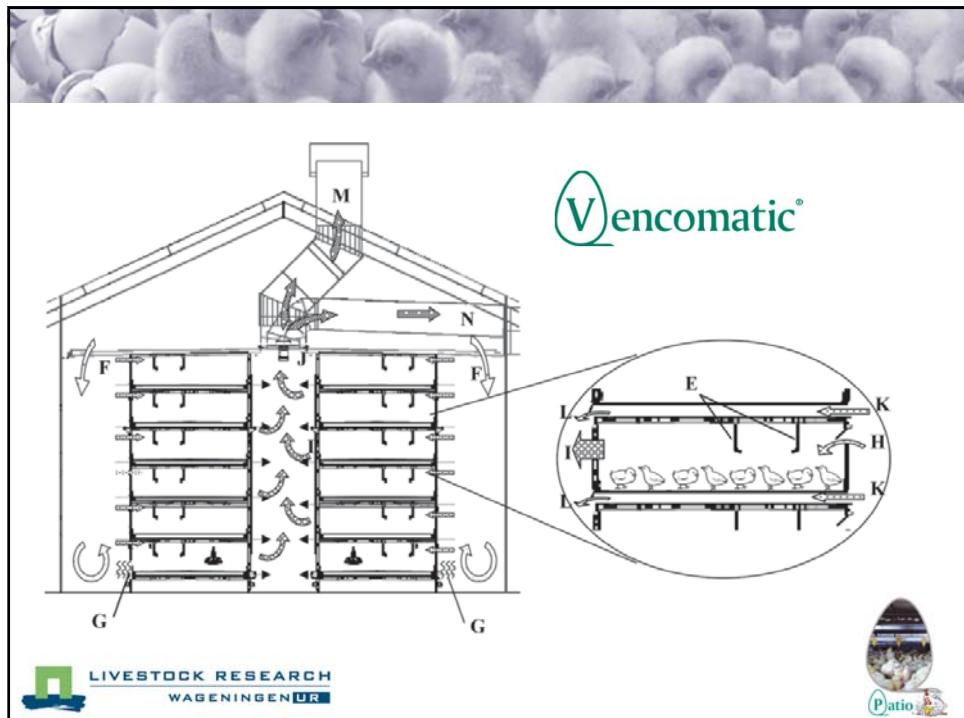
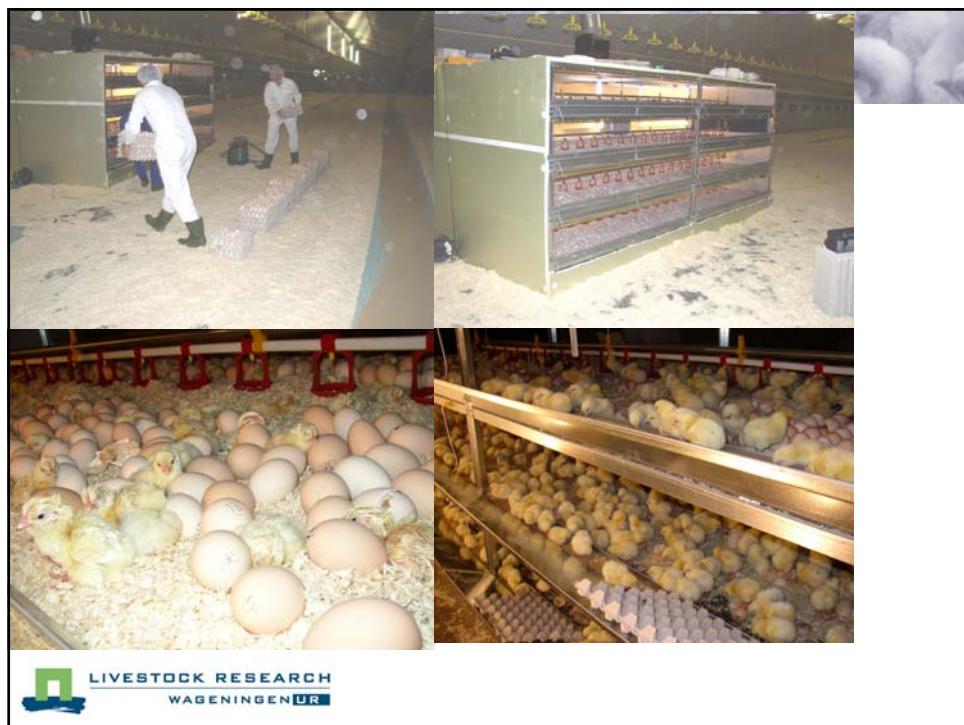
LIVESTOCK RESEARCH
WAGENINGEN UR













A photograph showing several large, modern broiler houses with yellow and red roofs under a cloudy sky. In the foreground, three workers in orange uniforms and hats are walking across a grassy area. A white cylindrical object lies on the ground in the foreground.

7 sites; 5 broiler houses per site; 250.000 broilers per house
共计7个厂址，每个厂区有5个肉鸡饲养舍，每个鸡舍有大约25000只肉鸡
Dimensioning for slaughtering of 12.000 broilers per hr; 1 house per day
每小时的屠宰能力为12000只肉鸡，每天一个鸡舍

LIVESTOCK RESEARCH
WAGENINGEN UR



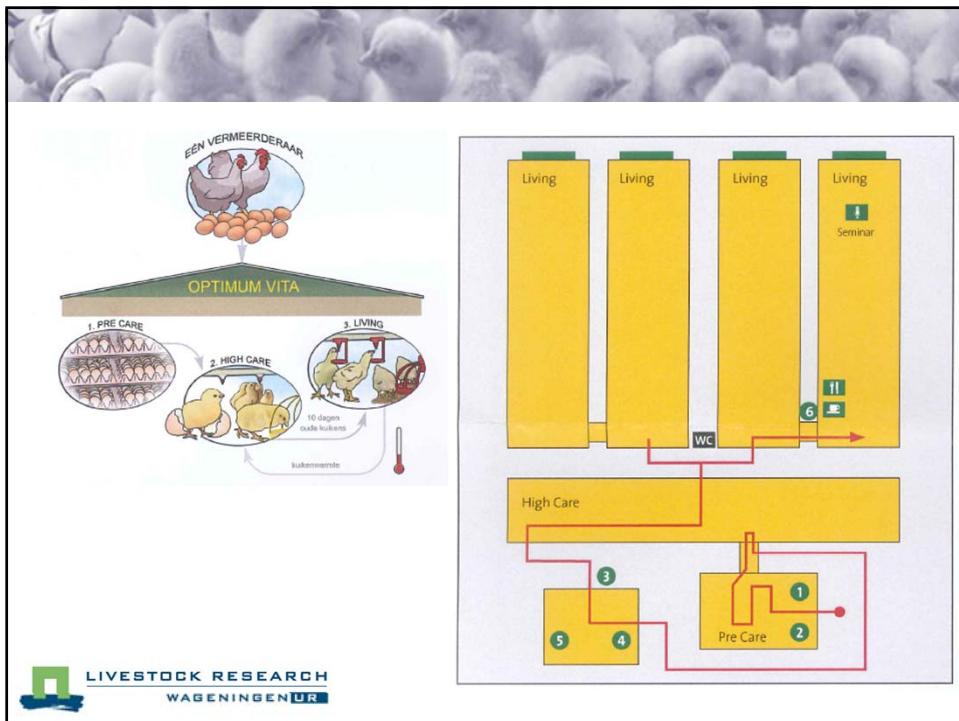
A photograph showing the interior of a broiler house. A worker in an orange uniform and hat stands in a aisle between two rows of tall, multi-tiered metal racks. The racks are filled with small chicks. The ceiling has several long, bright fluorescent light fixtures.

3 cells per broiler house
每个肉鸡饲养舍有3个孵化隔间
2 rows per cell
每个隔间有2列孵化架
6 floors (tier levels) high
每个孵化架有6层



Patio

LIVESTOCK RESEARCH
WAGENINGEN UR



28/07/2017





Innovations in and around the hatchery can be very successful

孵化技术的创新可以很成功

Technical inventions should support the biological processes

技术发明应该对孵化的生物过程起到支持的促进作用

- Never compromise on egg and chick quality
- 鸡蛋和雏鸡质量问题是不容妥协的
- Measure and adjust eggshell temperature
- 应该测量和调整蛋壳温度
- Measure and adjust chick temperature
- 应该测量和调整雏鸡的体温



Thanks for your attention!!

谢谢！

