Epol Experts Series:

CONSIDERATIONS FOR BROILER FARMING

By Martin Mhlongo & Stephan Jacobs

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THE PERFECT BALANCE

CHICKS DIG IT!

Curiosity may have killed the cat…

BUT IT GOT THE CHICKEN ACROSS THE ROAD

- Investment capital?
- Drive and passion?
- Explore and learn
- Why am I venturing into Broiler Farming?

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WHAT WE WILL BE COVERING TODAY:

- Capital investment
- Production inputs
- Route to market considerations
  - Who am I up against
  - Who am I serving
  - How often

THINKING OF STARTING UP?

- Minimal land needed depending on scale
- Land & capital available may determine quantity
- Feasibility study including market research
- Make sure you have a well thought through plan

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WHAT WILL I NEED?

- Suitable housing
  - Land (Own/Rent)
  - water
  - Electricity
  - access to my farm

WHAT WILL I NEED?

- Equipment
  - Drinkers & Feeders (Brooding phase and bulk)
  - water tank
  - heating system
  - Biosecurity
  - Scale
  - Thermometer
  - PPE etc…

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WHAT WILL I NEED? NB: Location

- Production Inputs
- Day old chicks
- Starter phase – 600g per chicken / day 0 to 15 / Cost avg. R600 per 100
- Grower phase – 1kg per chicken / day 16 – 25 / Cost avg. R800 per 100
- Finisher phase – 1.3kg per chicken / day 26 – 36 / Cost avg. R700 per 100
- Maintenance feed from date of selling till cage is sold out / R450 per 100
- Feed paper
- Bedding
- Medication & vitamins

ROOT TO MARKET

- Competitor SWOT analysis
- What will you do differently?
- Slaughtered or Live selling
- How can I minimize the customers acquisition cost in my supply?

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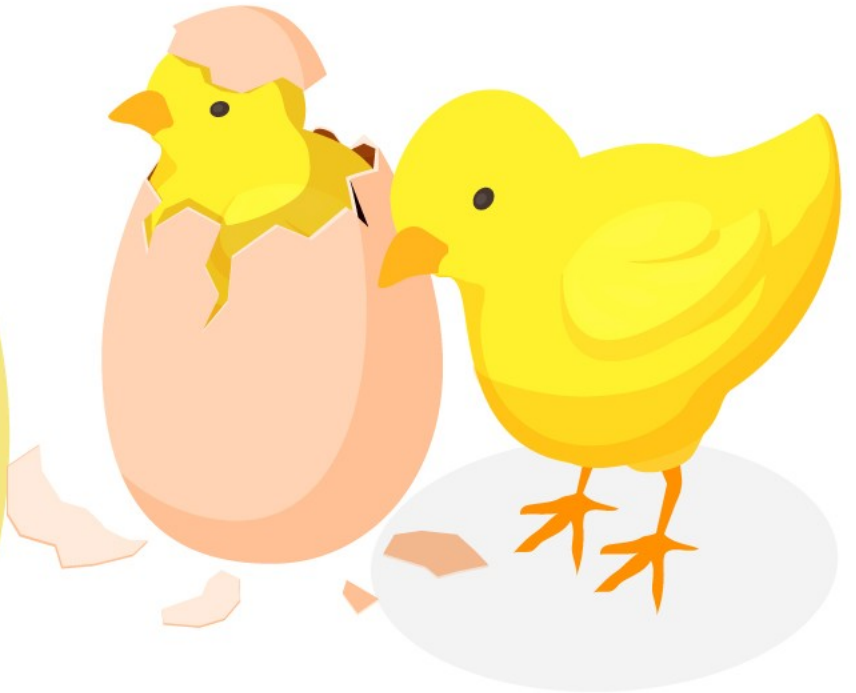
Chicks dig it!

ALL YOU NEED TO KNOW ABOUT CHICKS



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Chicken
or egg?

INTRODUCTION TO THE CHICK

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Scientists concluded that the chicken came first, not the egg, because the protein which makes egg shells is only produced by hens.

INTRODUCTION TO THE CHICK

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Jungle Fowl

White Plymouth Rock

Modern Broiler

INTRODUCTION TO THE CHICK

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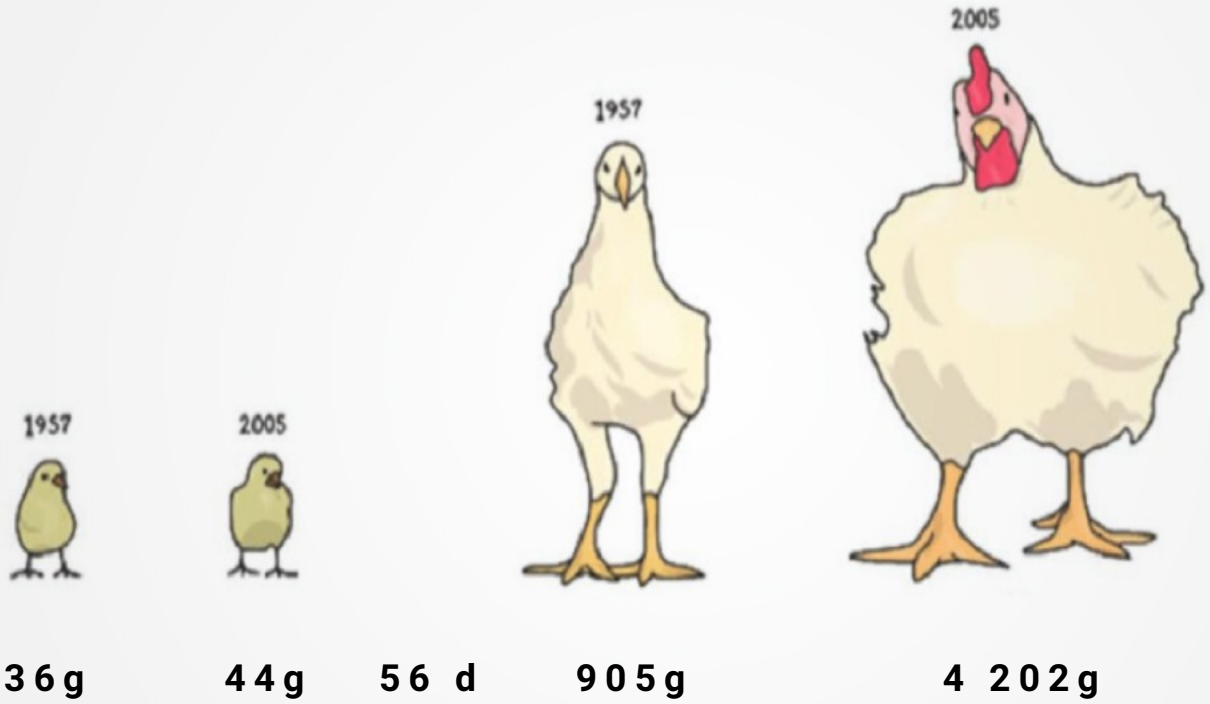

INTRODUCTION TO THE CHICK

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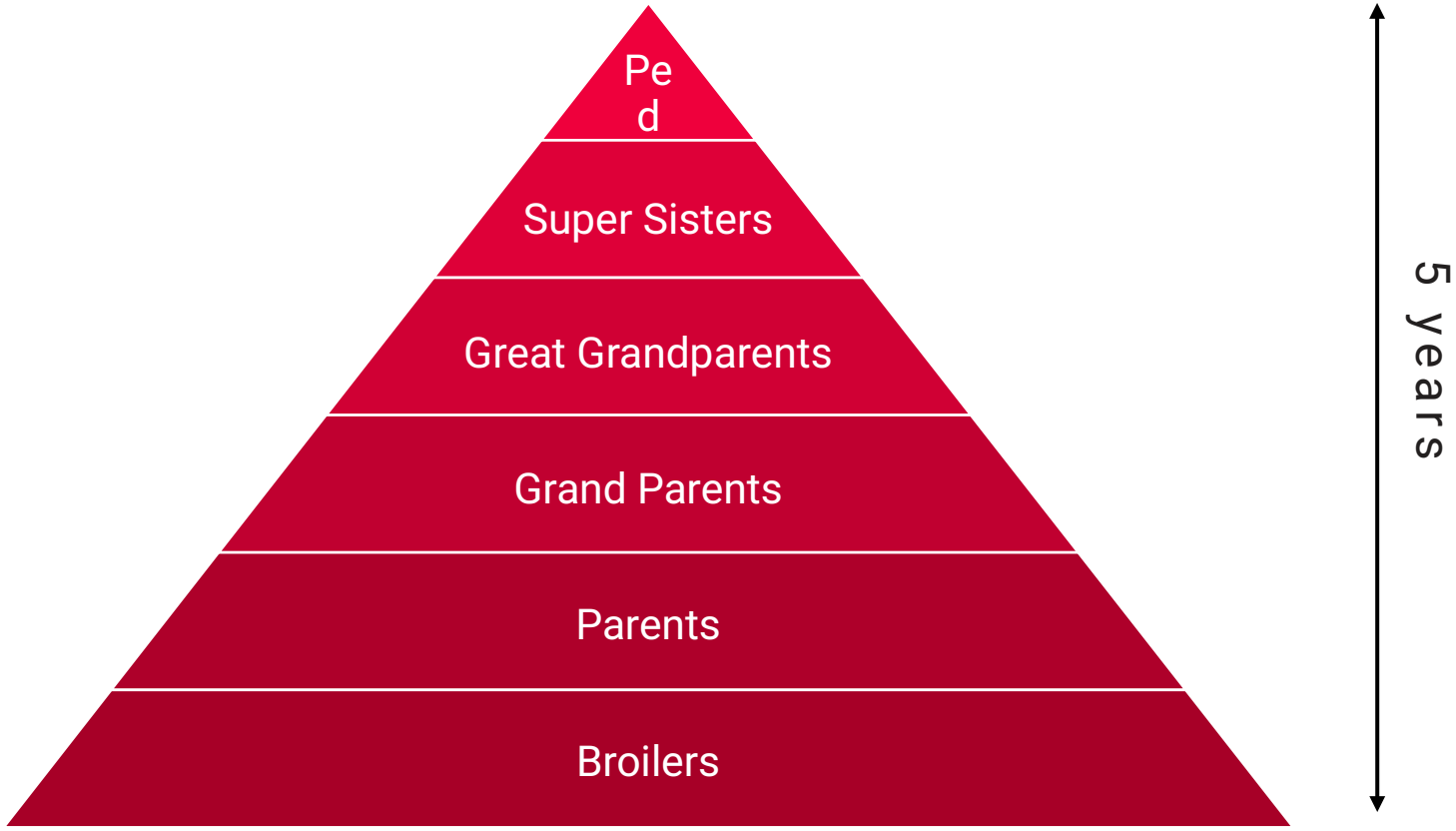
MY FAMILY TREE

1:5000



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Cobb-Vantress Inc.

BREED OPTIONS

Aviagen

Astral

ROSS

CBH COUNTRY BIRD HOLDINGS

Arbor Acres

BREED OPTIONS

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BREED OPTIONS

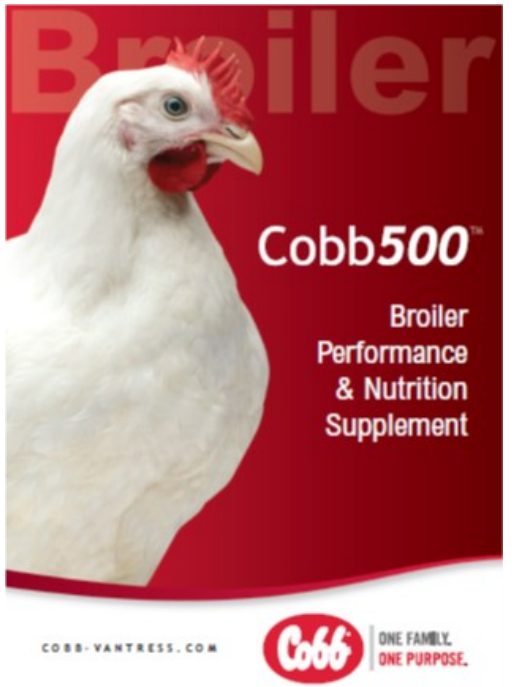
- Commercial
  - Gravis – independent local breed

- Traditional
  - Variety of dual-purpose breeds including:
  - Venda, Koekoek, Bushveld etc

COBB BROILER FOCUS

Cobb 500™

- Lowest cost of liveweight produced
- Superior performance on lower cost feed rations
- Most Feed Efficient
- Excellent Growth Rate
- Best Broiler Uniformity for Processing



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ROSS BROILER FOCUS

Ross® 308

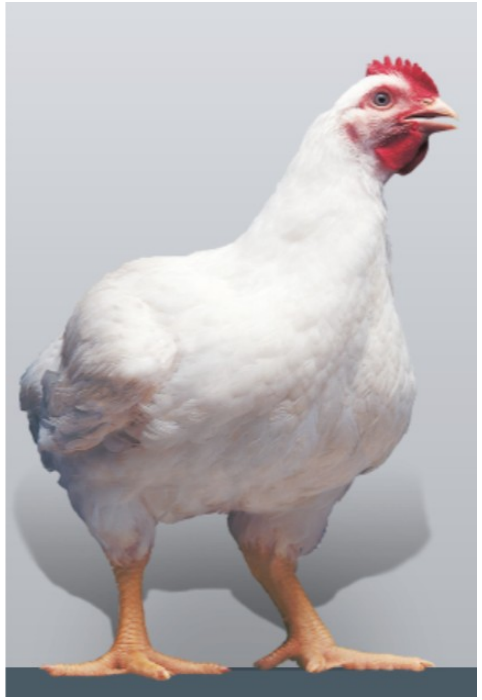
- Leading FCR
- Excellent Meat Yield
- Low cost of production

Ross 308 - Broilers

ARBOR ACRES BROILER FOCUS

Arbor Acres Plus

- Excellent Growth Rate, FCR and Livability
- Breast conformation for live market



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CHICK QUALITY

Photo 2 – Lethargic vs normal chick.

- Hatchery manager – Maximum Grade A chicks and good clean Navel
- Broiler Farmer – Active, well hydrated, low mortality
- Veterinarian – Active with well healed, infection free navel

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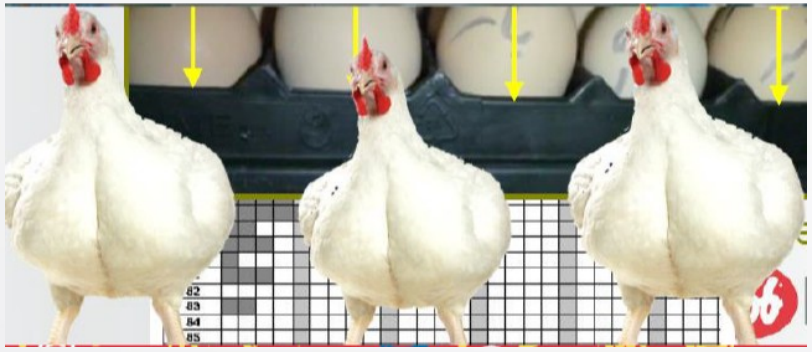
Importance of

CHICK QUALITY



- Vital for optimal live cycle performance
- Good start = good finish
- Lower ready for market age = Bigger premium on good start
- Superior/highly developed genetics expressed when all aspects of the chick is well balanced

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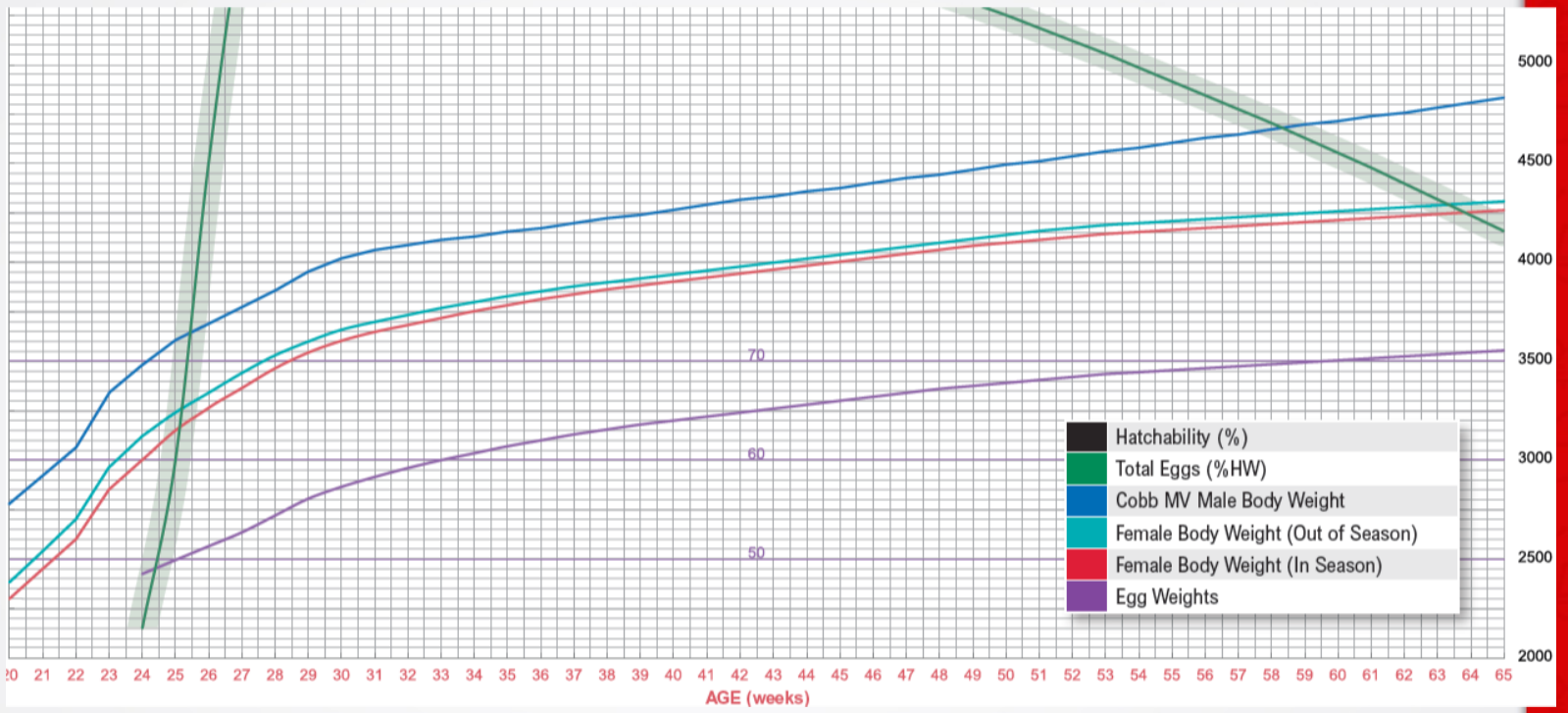

Chick Weight

Flock Age and Egg Weight

- 32 – 50 g Chicks
- Breeder Flock Age – 26 to 65 weeks

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Overview

CHICK QUALITY

- Chicks should be active, alert and lively
- Down should be clean and dry
- A round eye is normally a good indication of a healthy day-old chick
- Make sure it is broiler chicks…
- Generally vaccinated for Newcastle disease and Infectious Bronchitis

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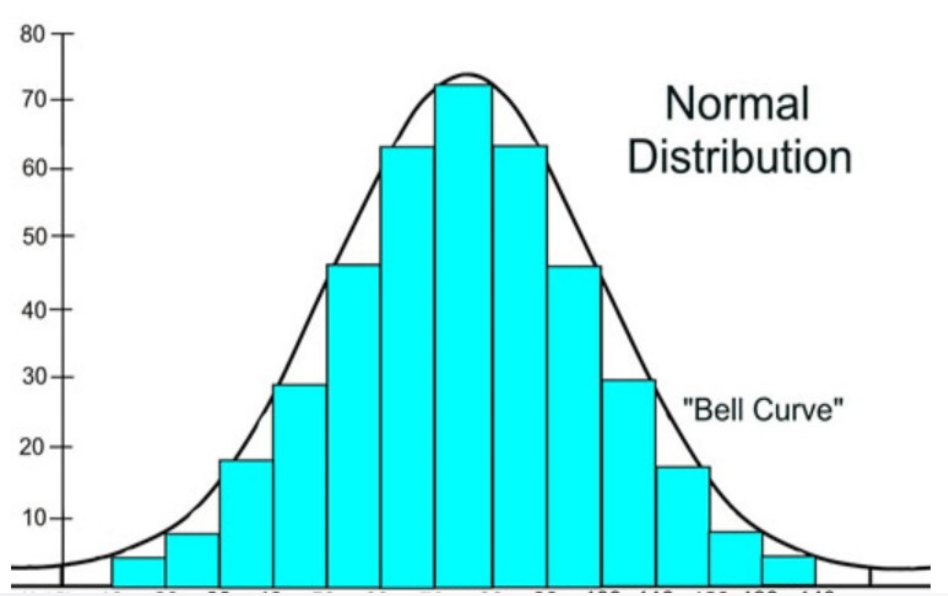
Uniformity

CHICK QUALITY



- Uniformity linked to flock age/hatching egg weight
- High number of chicks with similar weight (hight)
- Easy set up of drinkers and feeders
- Lower risk of competitive exclusion

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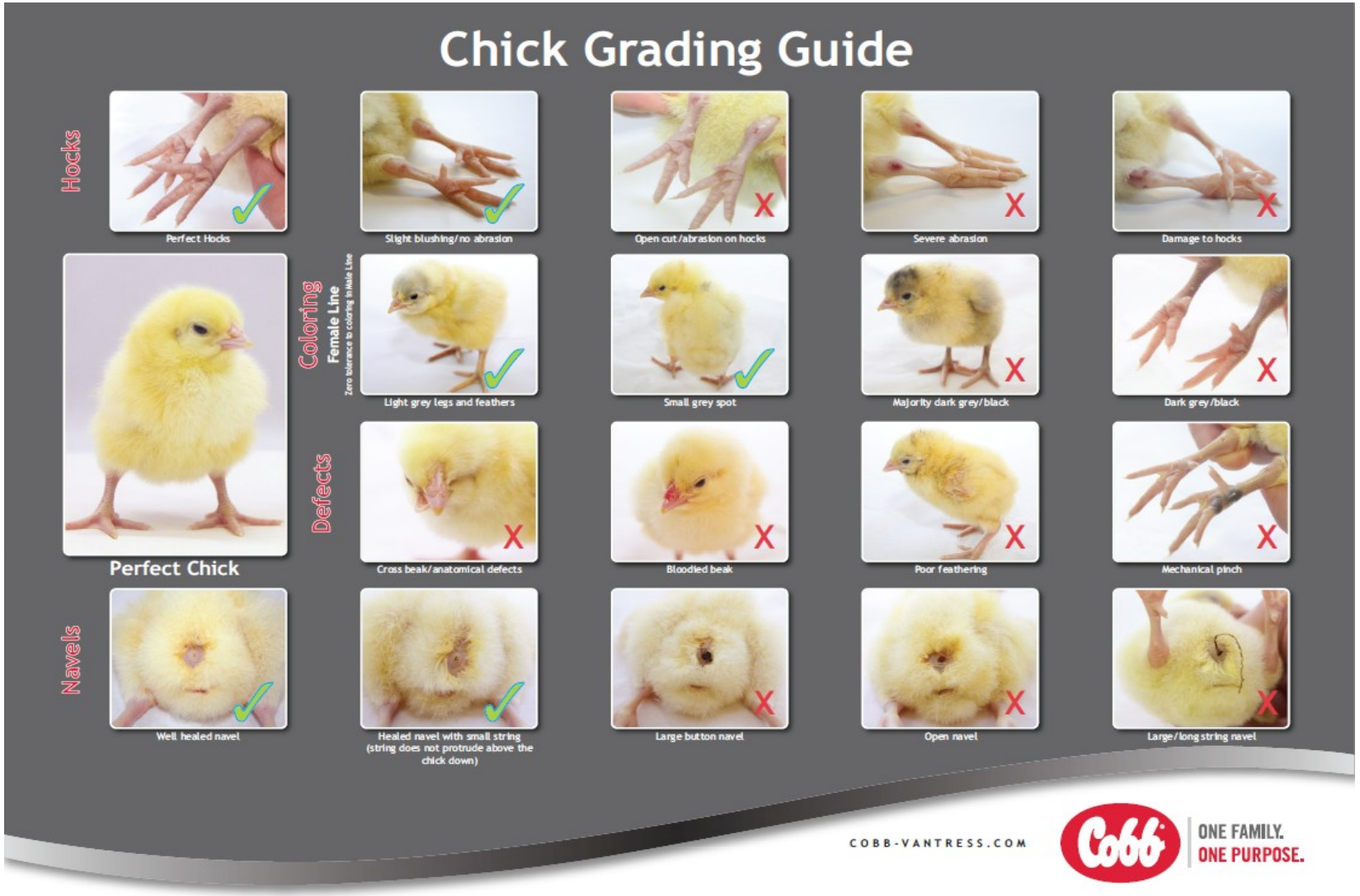

Visual Checks

CHICK QUALITY

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CHICK QUALITY EVALUATION: NAVELS

- Navel should be cleaned closed and well healed
- Poor quality navels are those that have a rough black button, a string or are open and unhealed
- Down should be clean and dry

CHICK QUALITY EVALUATION: BELLY

- The belly is a good indication of amount of yolk sack remaining that is linked to temperature and humidity during incubation
- Poor quality chicks will have hard bellies and tight/stretched skin

CHICK QUALITY EVALUATION: REFLEX

- Good indication of health and livability
- Strongest and healthiest chicks should flip onto its feet within 3 seconds
- Flipping over between 3 and 10 seconds would be acceptable
- Poor quality chicks take longer than 10 seconds

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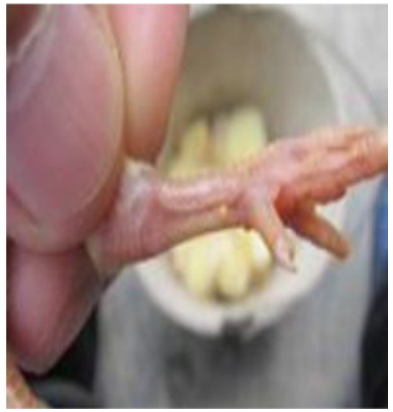
CHICK QUALITY EVALUATION: HOCKS AND MECHANICAL DAMAGE

- Good quality hock should have normal uniform colour with no visible inflammation
- Poor quality hogs include those that are inflamed, show blushing/redness, have abrasions or cuts
- Mechanical damage during processing can result in bruising abrasions and cuts



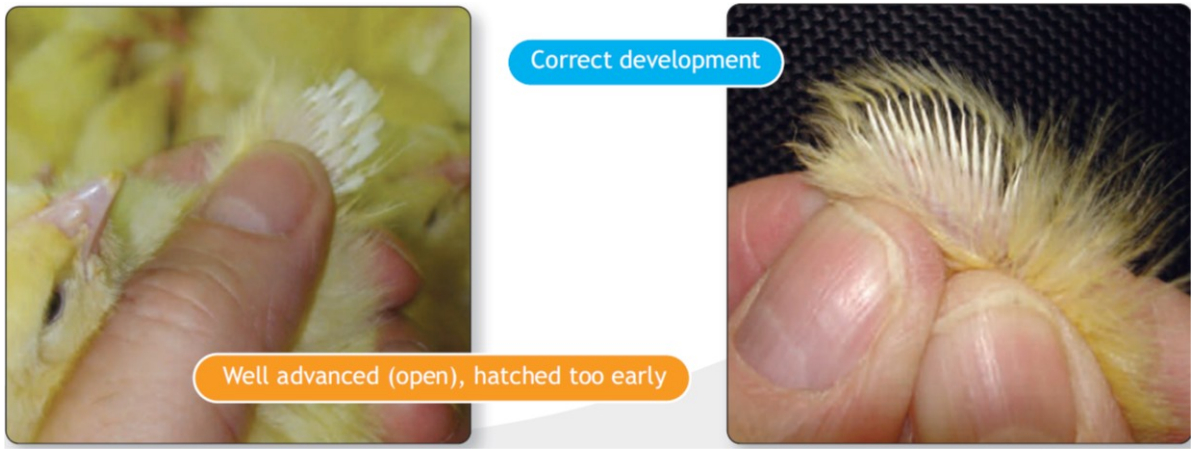


CHICK QUALITY EVALUATION: LEGS DEHYDRATION

- Good quality chicks should have clean waxy legs
- Extended time in the hatcher will lead to dehydration evident in through signs of dryness including dehydration (protruding leg vein), redness and legs feeling rough and not having a waxy sheen

CHICK QUALITY EVALUATION: BEAKS

- Beaks should be clean and free of any debris such as merconium
- Dirty beaks are and indication of the chicks spending too much time in the hatcher
- A red dot on the beak is an indication of overheating (or low moisture loss)



CHICK QUALITY EVALUATION: FEATHERING

- Feather development is a sign of how “fresh” chicks are
- Ideally there should be little to no feather development
- Chicks hatching early display feather development and carries a risk of dehydration

CHICK QUALITY EVALUATION: DEFECTS

- Defects include clubbed down, splay legs, crossed beaks, missing eyes and extra limbs

CHICK QUALITY EVALUATION: MODERN PARAMETERS

- Chick length
- Chick yield
- Residual yolk weight
- Cloaca temperature
- Organ weight and blood analysis for enzyme activity and oxidative stress

Look after your chick and it will look after you

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