

**WORLD POULTRY SCIENCE  
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**FACTORS AFFECTING THE  
POULTRY PRODUCTION: FOCUS ON  
POULTRY WELFARE**

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# Introduction

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- Poultry contribution valued at **RM6.78 billion** out of the **RM40 billion** economics value of meat industry in 2012.
- Poultry production system must be seen as an integrated system, from the hatchery to the food plate itself.
- All stages of the production will have an effect on the quality of the meat by their specificity and ultimately lead to an improvement or deterioration in the quality.
- Each stage of production is basically a manufacturing processes and quality and efficiency, in each phase of production, is dependent on the quality of INPUTS

# Quality Factors of Poultry Production

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- Quality control must begin with inputs at each stage of production (raw materials, egg quality, broiler quality, feed, etc.) and must be maintained during the entire production process.

# Quality factors for manufacturers of hybrid

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- Companies producing broiler have a great impact on quality of chicken meat because important parameters, such as the ratio meat / bone, chest carcass weight, carcass fat weight, are to a large extent genetically determined.

# Incubation affects chick quality

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- To optimise chick quality, many factors need to be taken into account. Already before the egg is laid, chick quality can be affected by breeder genetics, breeder flock age, and breeder flock health.
- Furthermore, after the egg is laid, nest hygiene and storage conditions at the breeder farm affect egg quality, embryo viability, and chick quality.
- Breeder farm management determines partly whether a hatchery can deliver perfect chickens.

# POULTRY WELFARE ISSUES FOR MEAT CHICKENS

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- Around 70% of chickens raised for meat globally are raised in intensive industrial farming systems.
- Intensively farmed chickens are bred to reach their slaughter weight in less than 6 weeks. This is half the time it would take traditionally. Their short lives are spent in overcrowded sheds with no access to the outside.

Inside the intensive chicken shed:

- Broiler sheds are generally bare except for water and food points, with no natural light. There is litter on the floor to absorb droppings which is not usually cleared until the chickens are gathered for slaughter.
- The air can become highly polluted with ammonia from the droppings. This can damage the chickens' eyes and respiratory systems and can cause painful burns on their legs (called hock burns) and feet.
- Chickens confined in these barren sheds are not able to adjust their environment to avoid heat, cold or dirt as they would in natural conditions.
- It can get very hot inside the sheds, especially in summer. If the ventilation system fails, thousands of birds can die of heat stress.

# Advantages of implementing Poultry Welfare System

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## **Advantages of this system**

- Reduced health risks in relation to animal health and food safety
- Reduce the risk of the diseases (e.g. respiratory problems)
- Less impact on the Environment
- Simplified management and reducing production costs

- Approach to Security of a product in the poultry Pathway level allows for efficient management with identifying weak links in the chain; Responsibility for quality assurance is for all the participants that take part in the composition of path.
- Global poultry industry is ever changing and influenced by a number of factors, whether inheritance, the Environment, consumers and retailers driven, legislation, or new and emerging diseases. These changes can have a significant effect on the quality of the life of the birds.

# Conclusion

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Despite Malaysia's current self sufficiency of 125 percent in poultry meat and eggs the industry is facing challenges such as the soaring global prices of imported feed ingredients, consumers concerns over the safety of poultry products, health and environmental issues, and animal welfare concerns. The Malaysian poultry industry must re-orient itself to address these pressing issues and to ensure that the industry is sustainable and continue to contribute to the national food security.

thank  
thank  
you!

**QUESTIONS & COMMENTS**