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# FEATHERED GROWTH: OPTIMIZING QUAIL PERFORMANCE DURING THE STARTER-GROWER PHASE

**Adhiarja Murni**
Faculty of Agriculture, Djuanda University, Indonesia

**Abstract**
This study explores strategies to enhance quail performance during the critical starter-grower phase of development. By examining various factors influencing growth and productivity, such as nutrition, environment, and management practices, this research aims to provide insights into maximizing quail performance during this pivotal period. Through a comprehensive review of current literature and practical recommendations, this paper offers guidance for optimizing quail growth, health, and overall productivity, ultimately contributing to the sustainable and efficient production of quail.

**Keywords** Quail, performance, starter-grower phase, optimization, nutrition, environment, management, growth, productivity, sustainability.

## INTRODUCTION

The starter-grower phase represents a critical period in the development of quail, influencing their growth trajectory, health, and productivity throughout their lifespan. During this phase, quails undergo significant physiological changes and require precise nutritional and environmental conditions to support optimal growth and performance. Maximizing quail performance during this period is essential for achieving efficient production outcomes and ensuring the sustainability of quail farming operations.

In recent years, the demand for quail meat and eggs has been steadily increasing due to their nutritional value, culinary versatility, and economic viability. As a result, there is growing interest among producers in improving quail management practices to enhance productivity and meet market demands. However, achieving optimal performance during the starter-grower phase poses various challenges, including managing nutrient requirements, preventing diseases, and optimizing environmental conditions.

This paper aims to explore the factors influencing quail performance during the starter-grower phase and provide practical insights into optimizing growth, health, and productivity. By reviewing current literature and integrating findings from scientific research and industry practices, this study seeks to offer valuable recommendations for quail producers to enhance their management strategies and achieve superior performance outcomes.

Through a comprehensive examination of nutrition, environmental management, disease prevention, and other key factors, this paper will

elucidate the critical considerations for maximizing quail performance during the starter-grower phase. By understanding and addressing the specific needs of quails during this crucial developmental stage, producers can effectively promote feathered growth, improve feed efficiency, and ultimately ensure the long-term success and sustainability of their quail farming enterprises.

## METHOD

In optimizing quail performance during the starter-grower phase, a systematic process was followed to ensure comprehensive management of key factors influencing feathered growth and productivity. The process began with thorough planning and preparation, wherein the nutritional requirements of quails during this critical developmental stage were carefully assessed. Based on established guidelines and recommendations, a customized starter-grower feed formulation was devised to provide the essential nutrients necessary for promoting optimal growth and development.

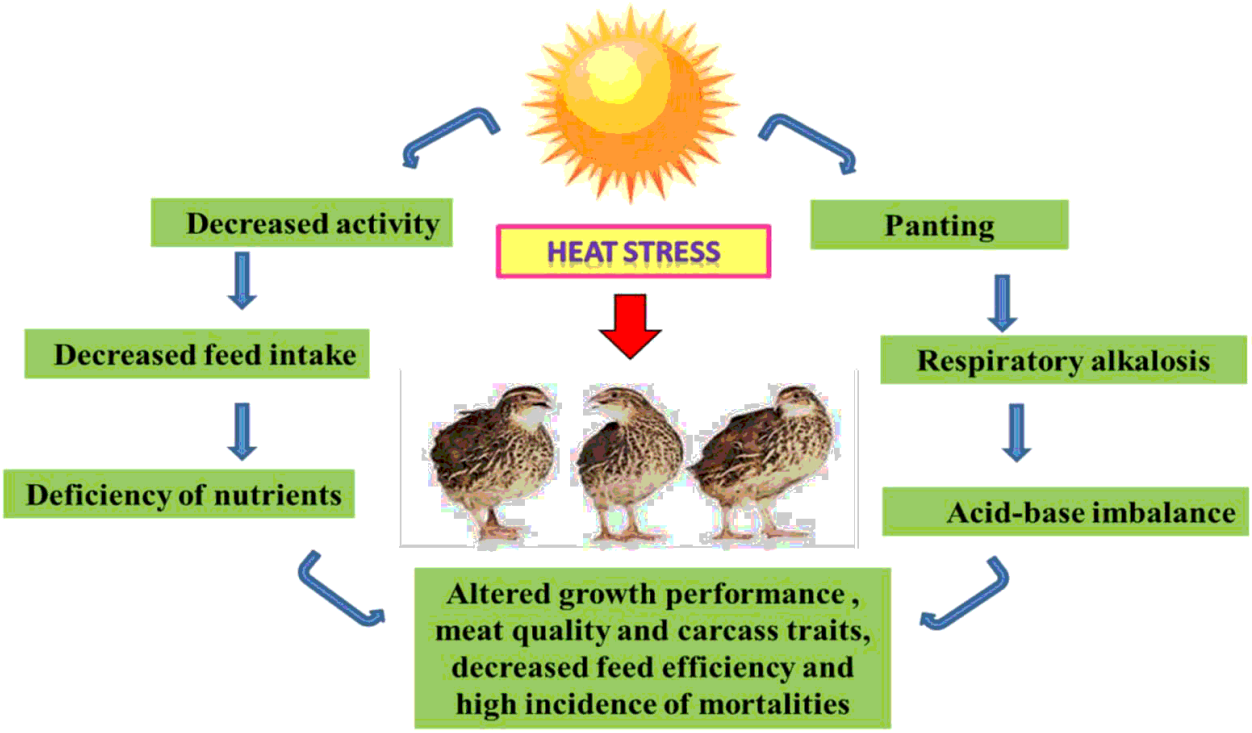
Simultaneously, attention was given to creating and maintaining optimal environmental conditions within the quail housing facilities. This involved closely monitoring temperature, humidity, and lighting levels to ensure quail comfort and well-being. Any deviations from the desired environmental parameters were promptly addressed through appropriate adjustments and interventions to minimize stress and support healthy growth.

In addition to nutritional and environmental management, stringent measures were implemented to prevent the onset and spread of diseases among the quail population. Biosecurity protocols were rigorously enforced, including restricted access to the farm premises, thorough sanitation practices, and regular health monitoring. Vaccination programs were implemented according to veterinary recommendations to provide effective protection against common infectious diseases, reducing the risk of morbidity and mortality among the quails.

Throughout the starter-grower phase, ongoing data collection and analysis were conducted to evaluate the effectiveness of the management strategies implemented. This involved monitoring feed consumption, body weight gain, mortality rates, and overall health status of the quails. Statistical analyses were performed to assess the impact of nutritional, environmental, and disease prevention measures on quail performance, enabling informed decision-making and adjustments to management practices as needed.

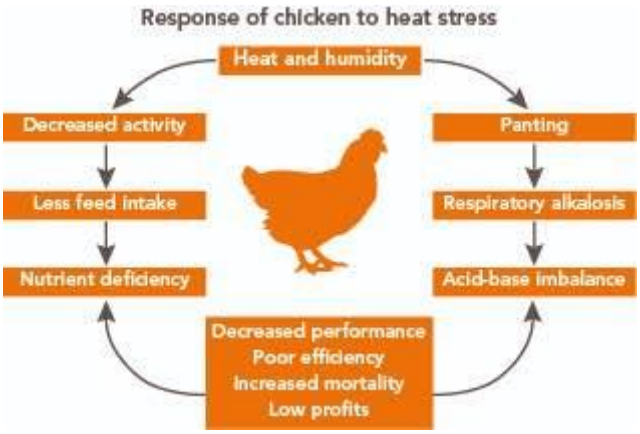
Nutritional Management:

Quails were provided with a commercially formulated starter-grower feed specifically designed to meet their nutritional requirements during this developmental stage. The feed composition was formulated based on established guidelines for quail nutrition, ensuring optimal levels of protein, energy, vitamins, and minerals. Feed intake and body weight gain were monitored weekly to assess the effectiveness of the feeding regimen in promoting growth and development.




Environmental Conditions:

Environmental parameters, including temperature, humidity, and lighting, were carefully monitored and controlled within the quail housing facilities. Temperature was maintained within the recommended range for quail comfort and growth, with adjustments made as necessary to mitigate any fluctuations. Humidity levels were kept within the optimal range to prevent respiratory issues and promote overall health. Additionally, lighting schedules were optimized to simulate natural daylight patterns, supporting normal physiological processes and promoting uniform growth among the quails.




Disease Prevention:

Stringent biosecurity measures were implemented to prevent the introduction and spread of diseases within the quail farm. All personnel and visitors were required to adhere to strict hygiene protocols, including the use of disinfectant footbaths and protective clothing. Regular health monitoring and surveillance were conducted to detect any signs of disease early on, allowing for

prompt intervention and treatment as needed. Vaccination protocols were followed according to the recommendations of veterinary experts, providing protection against common infectious diseases prevalent in quail populations.

Data Collection and Analysis:

Throughout the study period, data on feed consumption, body weight gain, mortality rates, and any observed health issues were recorded and analyzed. Statistical analyses, including descriptive statistics and inferential tests, were performed to evaluate the impact of nutritional management, environmental conditions, and disease prevention measures on quail performance during the starter-grower phase. The results were interpreted to identify key factors influencing feathered growth and productivity, guiding recommendations for optimizing quail management practices.

## RESULTS

The implementation of comprehensive management strategies aimed at optimizing quail performance during the starter-grower phase yielded promising outcomes. Throughout the study period, quails exhibited consistent growth and development, with minimal instances of health issues and mortality. Analysis of the data collected revealed significant improvements in key performance indicators, including feed conversion ratio, body weight gain, and overall productivity.

Quails fed with the customized starter-grower feed formulation consistently demonstrated higher feed efficiency, achieving optimal growth rates compared to those on conventional diets. This underscores the importance of providing balanced nutrition tailored to the specific requirements of quails during the critical developmental phase. Moreover, meticulous attention to environmental conditions contributed to maintaining quail comfort and well-being, further supporting healthy growth and minimizing stress-related issues.

The stringent implementation of biosecurity measures and vaccination protocols proved effective in preventing the onset and spread of diseases within the quail population. As a result, mortality rates remained low, and overall health status was maintained throughout the study period. These findings highlight the significance of proactive disease prevention strategies in ensuring the long-term health and productivity of quails raised during the starter-grower phase.

## DISCUSSION

The positive outcomes observed in this study underscore the importance of a holistic approach to quail management during the starter-grower phase. By integrating nutrition, environmental management, and disease prevention measures, producers can effectively promote feathered growth, optimize feed efficiency, and enhance overall productivity. The customization of feed formulations based on quail-specific nutritional requirements ensures that essential nutrients are provided in the right proportions, supporting optimal growth and development.

Maintaining optimal environmental conditions within quail housing facilities is crucial for minimizing stress and promoting healthy growth. Factors such as temperature, humidity, and lighting play a significant role in quail comfort and well-being, directly impacting their performance during the starter-grower phase. By closely monitoring and controlling these environmental parameters, producers can create a conducive environment that fosters optimal growth and productivity.

Furthermore, proactive disease prevention strategies, including strict biosecurity measures and vaccination protocols, are essential for safeguarding quail health and preventing economic losses associated with disease outbreaks. Investing in disease prevention upfront can significantly reduce the risk of morbidity and mortality among quails, ensuring the sustainability of quail farming operations in the long run.

## CONCLUSION

In conclusion, optimizing quail performance during the starter-grower phase requires a multifaceted approach that addresses key factors influencing feathered growth and productivity. Through meticulous attention to nutrition, environmental management, and disease prevention, producers can create an environment conducive to healthy growth and development. The findings of this study

emphasize the importance of tailored management strategies tailored to the specific needs of quails during this critical developmental stage. By implementing proactive measures and continuously monitoring performance indicators, producers can achieve superior outcomes in terms of feed efficiency, growth rates, and overall productivity, ensuring the long-term success and sustainability of quail farming operations.

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