



A Handbook of POULTRY DISEASES

A Hand Book of Poultry Diseases, First Edition offers a detailed concept on the brief introduction, epidemiology, pathogenesis, clinical signs, lesions, treatment and prevention of major poultry diseases. This First Edition includes access to discussions especially based on domestic birds. Well illustrated throughout, the book provides in-depth information on the major avian diseases in a concise manner that will provide good idea to the readers in this regard.



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Edited by :

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Acknowledgement

We would like to dedicate this edition to our parents, who have supported and guided us in every path of our lives. We also express deep sense of gratitude to our teachers for their valuable suggestions in writing this edition of the book. Our special thanks go to all the co-authors for their significant contributions in writing the different chapters of this book.

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Chapter 1

Introduction

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Poultry has influenced human civilization in many ways. Egg and meat of birds are being consumed since prehistoric times. Poultry plays very important role as a source of animal protein in the human diet; however, the availability of animal protein in the diet in developing countries is highly deficient. It is expected that poultry farming can help to provide animal protein to a large extent to burgeoning human population. Research and development efforts envisaged about five decades ago have helped to establish the Indian Poultry sector on a sound footing. As a result, it has now emerged as one of the dynamic and fast growing activities not only in the field of animal sciences but also business wise. Today, India stands at the 3rd (66 billion eggs) and 5th (3.4 million tons) place in the world in egg and poultry meat production respectively. Despite its impressive growth, the per capita consumption of egg and chicken meat is about 100 eggs and 2250 g per annum in urban areas whereas 15 eggs and 750 g chicken meat in rural areas against the recommended level of 180 eggs and 10.25 kg meat.

Similar to other animals, birds are susceptible to a variety of diseases. Knowledge about the type of birds, their anatomy and how they are managed does help one understand the type and kind of diseases different birds are susceptible to. Because some types of birds are raised for egg production or meat, such as commercial poultry, infectious diseases can spread rapidly among birds raised in a confined space. Poultry can also be raised in small numbers as backyard flocks.

Contact of herd animals with wildlife and domestic species of questionable health status should be prevented because such exposure is a direct threat to animal health and farm biosecurity. Unfortunately, this is difficult to control in some livestock operations such as when beef cattle and deer graze common areas and have unintentional contact. Pets should be restricted from entering animal housing areas unless they are used for purposes of protection or predator control. Any biosecurity program should include control measures for rodents and insects because they can harbor and transmit disease-causing pathogens.

Feed and water should be free of contamination when possible. Contamination of feed and water sources can pose a challenge to farm biosecurity. Feedstuffs, regardless of source, may be contaminated during preparation or storage. Maintaining hygienic conditions in the feed mill and controlling pests in feed storage areas will help prevent contamination of both feed ingredients and complete feeds. Periodic analysis of the farm water supply provides valuable information relative to water quality and possible infectious challenges.

The health status of the herd should be determined and monitored regularly. This is critical when considering internal bio-security and formulating disease control measures. The diseases monitored and the frequency of monitoring should be based on the health-related goals of the farm and input from the herd veterinarian as to the diseases of greatest significance to the farm.

A disease control program should be formulated and then recognized and implemented by all affiliated with the farm. Preventing the entry of pathogens and suppressing the activity of existing pathogens requires effort and cooperation by all on the farm.

□□□

About the Author



Dr. Manish Kr Singh S/o Mr. Umesh Prasad Singh and mother Late Indira Singh was born on June 1, 1984 at Vaishali, Bihar. He earned his B.V.Sc. & A. H. degree from Bombay Veterinary College, Parel, Mumbai in July, 2011. Thereafter, he joined the College of Post Graduate Studies, G. B. Pant University of Agriculture & Technology, Pantnagar, Uttarakhand in July, 2011 to pursue his Masters' degree in the Department of Livestock Production Management with major in "Poultry Science" and finally completed his Masters' degree in July, 2013 by securing an OGPA of 8.1/10 (first division). His hard work has recently being paid off as he got the best M.V.Sc. thesis Award (A.P. Chapter Award) for 2013-14 in IPSACON Annual Conference, Namakkal, Tamil Nadu. During his glorious academic career, he has been involved in ICAR funded research projects and published research papers in indexed international and national Journals. He has also qualified ASRB NET 2014 (1) in the concerned discipline with flying colors. He is now currently pursuing his PhD. Degree in the same University.



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Currently, the authors are included in the Reviewer Committee and Editorial Board in Poultry Punch and Poultry Manch magazines respectively.