



# Poultry Diseases

a guide for farmers & poultry professionals

Second Revised & Enlarged Edition

J. L. VEGAD

## CONTENTS

### **SECTION I: DISEASES**

1	Introduction	3
2	Important Terms	6
3	<b>Viral Diseases</b>	12
	Adenovirus infections	99
	Avian encephalomyelitis	83
	Avian influenza ( <b>Bird flu</b> )	42
	Avian nephritis	86
	Avian reoviruses	89
	Avian rotaviruses	92
	Chicken infectious anaemia	94
	Egg drop syndrome (EDS 76)	87
	Fowl pox	38
	Inclusion body hepatitis	100
	Infectious bronchitis	29
	Infectious bursal disease (Gumboro disease)	21
	Infectious laryngotracheitis	35
	Infectious stunting syndrome	105
	Leechi disease	102
	Lymphoid leukosis	76
	Marek's disease	64
	Ranikhet disease (Newcastle disease)	13
	Reticuloendotheliosis	97
4	<b>Bacterial Diseases</b>	110
	Colibacilosis ( <i>E. coli</i> Infection)	110
	Fowl cholera	153
	Fowl typhoid	143
	Gangrenous dermatitis	133
	Infectious coryza	121
	Necrotic enteritis	125
	Paratyphoid infections	145
	Pullorum disease	137

Staphylococcosis	157
Streptococcosis	161
Tuberculosis	165
<b>5 Mycoplasmal Diseases</b>	170
Mycoplasmosis	170
<i>Mycoplasma gallisepticum</i> Infection	170
<i>Mycoplasma synoviae</i> Infectiuon	175
<b>6 Fungal Diseases</b>	179
Aspergillosis	179
Candidiasis (Thrush)	182
Mycotoxicosis	184
<b>7 Chlamydial Disease</b>	197
Avian chlamydiosis	197
<b>8 Parasitic Diseases</b>	200
<b>A Helminthic Diseases</b>	200
Flukes (Trematodes)	200
Intestinal roundworms	201
Roundworms (Nematodes)	201
Tapeworms (Cestodes)	200
<b>B Protozoal Diseases</b>	204
Coccidiosis	204
<b>C Arthropod Diseases</b>	216
Fleas, and Mites	217
House flies and Mosquitoes	220
Lice	216
Ticks	219
<b>9 Nutritional Diseases</b>	222
Biotin	241
Choline	245
Folic acid (Folacin)	243
Nicotinic acid (Niacin)	239
Pantothenic acid	240

Vitamin A	226
Vitamin D	229
Vitamin E	231
Vitamin K	234
Vitamin B1 (Thiamine)	236
Vitamin B2 (Riboflavin)	237
Vitamin B6 (Pyridoxine)	238
Vitamin B12 (Cobalamin)	244
Vitamin C (Ascorbic acid)	248
Calcium and phosphorus	249
Iodine and Copper	257
Iron and Zinc	259
Manganese	256
Potassium and Magnesium	255
Selenium	260
Sodium chloride	253
Water	262
<b>10 Metabolic Diseases</b>	<b>264</b>
Ascites	269
Cage layer fatigue	287
Chondrodystrophy	291
Fatty liver and kidney syndrome	281
Fatty liver-haemorrhagic syndrome	283
Gout	264
Rickets	279
Sudden death syndrome	289
Urolithiasis	268
<b>11 Miscellaneous Diseases/Conditions</b>	<b>292</b>
Big liver and spleen disease	306
Bumble foot, Intussusception, Volvulus	308
Dehydration	302
Effects of ammonia	299
Egg-bound condition	306

Femoral head necrosis	307
Foreign body in proventriculus, Blue-wing disease, Rodents	310
Heat stress	292
Impaction of crop, Gizzard erosion, Prolapse of the oviduct, Vent gleet	309
Smothering	303
Swollen head syndrome	305
Vices	295
<b>SECTION II: DISEASE DIAGNOSIS</b>	
12 Introduction	315
13 How to carry out field investigation	316
14 Postmortem examination	327
15 Materials to be sent to the laboratory for disease diagnosis	332
16 Disease diagnosis on the basis of symptoms	339
17 Disease diagnosis on the basis of postmortem findings	341
<b>SECTION III: DISEASE TREATMENT/PREVENTION</b>	
18 Introduction	349
19 Medicines and vaccines	350
20 Antibiotic growth promoters	353
21 Probiotics	357
22 Mould inhibitors and toxin binders	361
23 Enzymes	366
24 Oligosaccharides	390
25 Osmoregulators and methyl donors	397
26 Acidifiers	401
27 Biosurfactants	406
<b>SECTION IV: DISEASE CONTROL</b>	
28 Introduction	409
29 Biosecurity	410
30 Disinfection	425

31	Sanitization	434
32	The avian immune system	435
33	Impact of nutrients on avian immunity	455
34	Vaccines and vaccination	467
35	Vaccination schedules	479

## **SECTION V: TIPS ON REARING AND MANAGEMENT**

36	Introduction	485
37	Preparation before chicks' arrival	487
38	Care of chicks on arrival	489
39	Brooding management	492
40	Water, feed, light and litter management	496
41	Broiler management	501
42	Layer management	511
43	Nutrition and feed basics	528
	Comments of the International Journals on the First Edition	880
	Index	883