

Winter Management of Today's Chick

শীতের



পরিষেবা



YouTube PoultryTroubleshooter_BDutta
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18-11-2022

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WINTER BROILER MANAGEMENT

শীতের ব্রয়লার পরিষেবা

➤ Elevation of Temperature in Poultry house to provide COMFORT to chicks through efficient Brooding

বান্ধার জায়গা গরম রাখতে হবে

➤ Maintaining proper VENTILATION through CURTAIN management from day 1 to lifting/Harvesting

পর্দার সঠিক ব্যবহার করে বাতাস চলাচল বজায় রাখতে হবে

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BROILER MANAGEMENT



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No of Days to Reach 2Kg Body Weight



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ব্রমলার বাচ্চার ক্ষমতা কত What is Broiler Chick Potential?

No	Farmer	Hatch date	Breed	Chicks	Mort %	Body Wt	FCR	M Age	Day Gain	EEF	CCCR
1	Jafal	18-Oct-20	Lowman IR	998	3.61	2.139	1.300	37.03	73.74	468	1.338
2	Khurshed	18-Oct-20	Ross 308	500	2.00	2.210	1.432	33.00	66.97	458	1.380
3	Doll	18-Jan-21	Cobb	900	3.60	3.353	1.533	35.00	71.61	457	1.419
4	Kanoo	09-Oct-20	Lowman IR	747	2.41	2.359	1.493	34.00	65.28	454	1.403
5	Shahdul	14-Nov-20	Lowman IR	1,495	1.94	2.220	1.413	34.12	65.06	452	1.358
6	Babul 2	03-Nov-20	Lowman IR	499	2.40	2.437	1.466	36.00	67.69	451	1.357
7	Shahinur	18-Oct-20	Ross 308	1,226	4.67	2.646	1.551	36.47	70.80	450	1.399
8	Jinatun	18-Oct-20	Lowman IR	540	0.93	2.172	1.450	33.00	65.82	450	1.407
9	Sattar	09-Nov-20	Lowman IR	1,250	2.80	2.374	1.520	34.01	69.80	446	1.427
10	Monalisa	11-Jan-21	Lowman IR	1,999	3.38	2.274	1.480	33.33	68.23	445	1.412
11	Parul	24-Oct-20	Lowman IR	1,997	4.76	2.561	1.529	36.13	70.88	442	1.389
12	Mizanur	19-Oct-20	Lowman IR	1,500	4.07	2.780	1.554	35.45	71.50	441	1.367
13	Harun	26-Oct-20	Lowman IR	700	4.00	2.366	1.478	35.01	67.58	439	1.387
14	Lubna	01-Oct-20	Ross 308	500	2.40	2.335	1.492	35.00	66.71	436	1.408
15	Sanowara	29-Nov-20	Lowman IR	797	4.39	2.306	1.488	34.00	67.82	436	1.412
16	Kamal	20-Oct-20	Lowman IR	1,396	3.87	2.571	1.516	37.49	68.58	435	1.373
17	Shamim	24-Sep-20	Ross 308	700	5.71	2.346	1.495	34.18	68.64	433	1.409
18	Kalam	26-Oct-20	Lowman IR	800	4.13	2.578	1.541	37.22	69.26	431	1.397
19	Rubel 2	09-Nov-20	Lowman IR	3,000	2.27	2.180	1.463	34.15	63.84	426	1.418
20	Korim	19-Oct-20	Lowman IR	3,836	4.59	2.707	1.564	38.99	69.43	424	1.387
21	Layl	29-Oct-20	Lowman IR	1,495	4.03	2.378	1.505	36.00	66.06	422	1.411
22	Shafe	06-Jan-21	Lowman IR	2,799	3.43	2.280	1.493	35.03	65.09	421	1.423

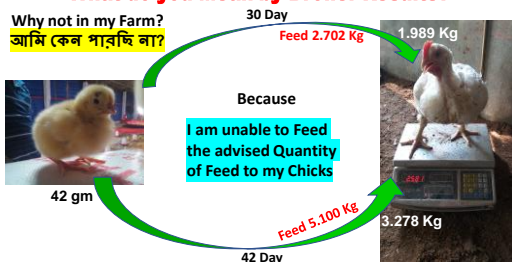
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What do you Mean by Broiler Results?



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What a Result in open shed?

BROILER Performance in Bangladesh											
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Why not Eating Recommended Amount Feed?

Do you Know the Daily Recommended Feed Amount?

Do you Know the Need of your Chicks to Consume Daily Recommended Feed Amount?

Here is all the Problem; **Awareness & Attitude** - the issue

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Need of the Chick for Recommended Feed Intake

- Comfortable House Environment for Chicks 24 x 7
আবাসের পরিবেশ
- Disease Free Housing of Chicks জীবাণুমুক্ত ঘর
- Easy accessibility of recommended Feed & Sanitize Drinking Water 24 x 7
সহজলভ্য পুষ্টিকর খাবার ও শোধন করা জল
- Health Management, especially Gut Health
স্বাস্থ্য পরিষেবা, বিশেষত পেটের
- Protection from Diseases by Vaccination & Biosecurity
রোগ থেকে রক্ষার ব্যবস্থা



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Chick Housing In Disease Free Farm



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Housing In Disease Free Farm জীবাণুমুক্ত ঘর



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Easy Access to Feed & Safe Water from Start



সহজলভ্য পুষ্টিকর খাবার ও শোধন করা জল



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Easy Access to Feed & Safe Water from Start



Ground Reality



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Day-to-Day Health Management



Disinfection



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Day to Day Health Management স্বাস্থ্য পরিষেবা, বিশেষত পেটের



Cleaning

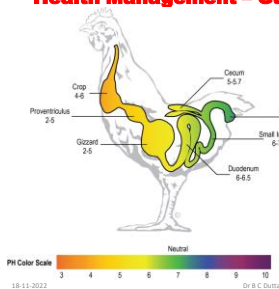


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Health Management – Gut Health & Immunity



- Digestion of Feed
- Immunity Development
- Entry point of Microbes

Gut or Intestinal Health

- Water Acidifier
- Sanitizer
- Probiotics

Immunomodulator
to Improves Immunity
against Disease

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Protection from Disease **রোগ থেকে রক্ষার ব্যবস্থা**



Implementation of 100% Biosecurity



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Comfortable House Environment **আরামের পরিবেশ**

What you wants First for Comfort?

Bed/Litter
I) Space to Live, Eat & Rest
II) Quality; Dry & Softness

What Next?

Temperature
Most Important for everyone

What is Next you Want?

Ventilation/ Air Circulation
O₂ Entry, Exit of CO₂ & NH₃ and Litter Dryness

Next?

Light
Activity, to see food & Water and Welfare

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Protection from Disease through Vaccination

- > Vaccination: full protection against Diseases
- > Vaccine reduce severity of disease & minimize mortality



- Vaccine Schedule: Disease history & strain available
- Vaccine Cold Chain Maintenance
- Vaccine Application: Eye drop or Water or Injection

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Comfortable Bed to Live, play & Sleep



Possible in EC Shed

Disease Free House with Comfort

@ Dry/Soft Litter till Lifting @ Comfortable Temp Day 1 to Lifting @ Sufficient Ventilation @ Enough Light

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Comfortable Bed to Live, play & Sleep

Floor Space Need for Broiler depends

- Live Weight Target & Marketing Age
- Season/ Climate
- Type & System of Housing and Equipment, particularly Ventilation

1 st Week	0.3 – 0.4 sq ft
2 nd Week	0.5 - 0.6 sq ft
3 rd Week	0.7 – 0.8 sq ft
4 th Week onwards	1.4 – 1.6 sq ft



Under Open Farming System (Non EC) with Excellent Ventilation where both Side Open, 1,580 Kg Broiler Meat per Sq Ft is Possible

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Comfortable Temp from Start to Lifting in Summer

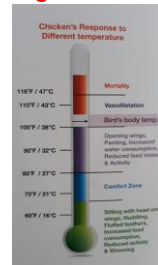
COLD STRESS	COLD	OPTIMUM	WARM	HEAT STRESS
Below 10°C	10 – 18°C	18 – 24 °C	25 – 30°C	Above 30°C
Exhaustion	Adjustment	Comfort Zone	Adjustment	Exhaustion

To achieve maximum performance, poultry house Temperature must be kept consistently within the bird's thermo-neutral or comfort zone

Otherwise, the bird will expend additional energy to regulate its Body Temperature resulting poor Body Weight Gain & Poor FCR

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Comfortable Temp from Start to Lifting in Winter

Age (Days)	Whole-house brooding temp. °C (°F)
1	30 (86)
3	28 (82)
6	27 (81)
9	26 (79)
12	25 (77)
15	24 (75)
18	23 (73)
21	22 (72)
24	21 (70)
27	20 (68)

It is crucial for broiler performance to ensure a proper development of the chick (incubation + first 10 days of grow-out) especially because the chick does not have the ability to properly control its body temperature ("Cold Blooded") during this period.

Winter temperatures pose an additional challenge to the development of chick and the subsequent adult broiler. This is mainly due to poor temperature control and also to compromised ventilation in the broiler houses. Good stockmen have the responsibility to maintain a good environment for the chick to maximize the birds' genetic potential.

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WINTER BROILER MANAGEMENT

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বাছার জায়গা গরম রাখতে হবে

➤ Maintaining proper VENTILATION through CURTAIN management from day 1 to lifting/Harvesting

পর্দার সঠিক ব্যবহার করে বাতাস চলাচল বজায় রাখতে হবে

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WINTER BROILER MANAGEMENT

- Hatch Pull-out in early morning under comfortable Hatchery Temperature
- Transport & Housing in daytime (10 am-2 pm)
- Gap between Pull-out & Placement < 10 hours



- Good quality Curtain on both side of shed for entire length
- Avoid direct chilling air on chicks till 22 days Age

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BROODING

Brooding is Nursing & Special Care of newly hatched Chicks



Brooding is essential during 1st 7 – 10 days of Chicks Life

Target for Brooding - 1st Week Body Wt 200gm & Mortality <1%

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WINTER BROILER MANAGEMENT

Broiler after 22 days are not prone to Chilling due to feather growth & Change in basic Temp need; USE CURTAIN CAREFULLY maintaining Ventilation



पर्दा উপর থেকে নিচে নামাতে হবে দড়ির সাহায্যে

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BROODING OBJECTIVE সঠিক ব্রুডিং কেন দরকার?

- 1) Uniformity
- 2) Control Mortality – High Livability
- 3) Good 1st Week Body Wt (200 gm +) or (4.5 – 5) x Chick Wt
- 4) Development of Immune system – Healthy chicks; less Disease
- 5) Development of Intestine – Better Feed utilization; better FCR. Better GALT – Better Immunity
- 6) Profitability



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Brooding Essentials

- Disease Free House
- **Temperature**
- **Ventilation**
- Bedding (Space & Litter)
- **Light**
- **Safe Drinking Water**
- **Early & Easy Access to Feed**



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BROODING Temperature MANAGEMENT



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Winter Night Gas Brooding Bangladesh - Jan'20



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Comfortable Temp from Placement Time In Winter



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Comfortable Temp from Start to Lifting In Summer

Ground Reality



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Good Ventilation for Air Exchange & Dry Litter

Ventilation /Wind Movement/ Air Exchange is the **minimum amount of Air volume required to maintain full Genetic Potential of birds**

Objective of Ventilation

- To Provide Oxygen required for growth
- To Remove unhealthy gas: CO₂, NH₃, etc
- To Remove Excess heat created by birds and litter
- To Remove Water from faeces & vapour from broilers respiration to **maintain the RH** (At 10 days age, 15 broilers produce almost 1 litre water/Day, of which 25 - 40 % from faeces) throughout the growing period and to maintain Good Litter condition



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BROODING Ventilation MANAGEMENT



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BROODING Ventilation MANAGEMENT

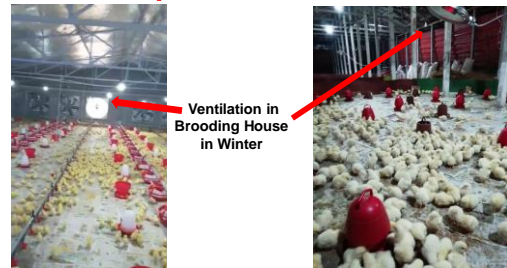


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BROODING Temperature & Ventilation MANAGEMENT



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Good Ventilation for Air Exchange & Dry Litter

Air quality is critical during Brooding, proper ventilation is required to maintain correct Temp & Humidity

Inadequate ventilation leads to high incidence of Ascites & CRD



Poor ventilation leads to reduced air circulation, accumulation of NH₃ which results low Feed Intake & reduced Growth rate and Loss of Cilia in Trachea, which in turn leads to Sneezing & other abnormal Respiratory Sounds

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WINTER MANAGEMENT PROBLEM



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Good Ventilation for Air Exchange & Dry Litter



Fans are on just after placement in Automatic EC Shed

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Winter Management Failure – Ascites

Ascites; fluid in abdominal cavity - “Water belly” মুরগির পেটে জল



- Ascites is a major reason of Economic Loss in Broiler Industry, especially during winter
- Mortality usually 5 -12% and may go up to 25%

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Winter Management Failure - Viral Mortality



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Infections of highly pathogenic virus with morbidity & mortality almost 100%

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THANK YOU

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Need of the Chick for Desired Performance



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