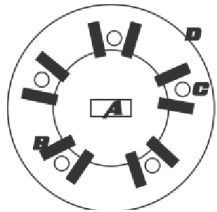




# BROODING

Brooding is the provision of artificial heat to help the chicks in temperature regulation. The heat can be provided by gas, electricity or charcoal. The brooder area should be ready at least 24 hours before the chicks arrive.



- A. Heater
- B. Feed tray:10
- C. Drinkers: 5
- D. Surround:4m diameter  
0.6m high

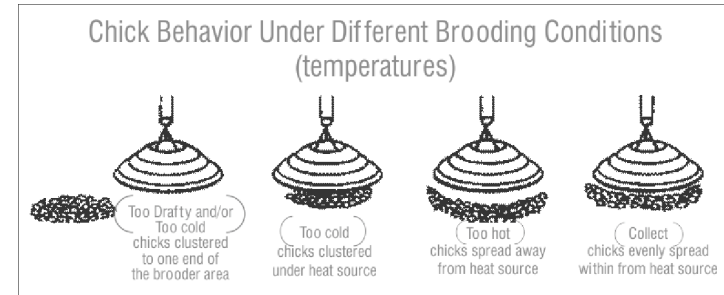
Depending on the weather conditions, the brooder must be turned on at least 6 hours prior to the arrival of the chicks. This ensures that the house environment, water and feed are at the right temperature when the chicks arrive. Ideally, chicks should be placed in the brooder 6-12 hours after hatching. The longer the time between hatch and placement, the more the chicks become adversely affected.

Before placing chicks in brooder, provide wholesome drinking water and spread feed on paper placed on litter and in trays or feeder lids that are evenly distributed in the brooder area. It is advisable to add Glucose (or sugar), vitamins and liquid paraffin (not kerosene) to this water. This provides the birds with a ready source of energy and helps in overcoming stress caused by the travelling while the liquid paraffin assists in the passage of faeces.

During brooding it is important to maintain the proper temperature in the brooder. Below are the guidelines of the temperature to be maintained:

AGE (weeks)	TEMPERATURE (°C) AT CHICK LEVEL	TEMPERATURE (°C) IN THE HOUSE
1	33 - 35	30 - 32
2	30 - 32	27 - 29
3	27 - 29	24 - 26
4	24 - 26	21 - 23

Temperature should be monitored by installing thermometers in the brooder area at the height of the chicks. Observing the chicks' behaviour is also a good guide of the ambient temperature. (see diagram).



Excessive chick noise during brooding is an indication that chicks are uncomfortable, This is commonly due to improper temperatures and symptoms include:

### Chilled Chicks

Chicks huddle together especially under the brooder. Watery intestinal and faecal contents leading to watery/wet droppings faecal leading to wet pasted vents.

### Overheated Chicks

Chicks lie prostrate with their head and necks stretched out on the floor. Chicks pant. Increased water consumption by the chicks, leading to distension of the crop and intestines by the extra water. Chicks move away from the heat source and seek cooler parts of the house. Sometimes crowd around the drinkers.

It is essential to maintain the proper temperature during brooding as chicks which are chilled in the first day of life will be stressed, have increased mortality, dehydration, retarded growth, poor uniformity and a higher incidence of ascites. While overheated chicks will be dehydrated, resulting in high mortality, runting/stunting syndrome and poor flock uniformity. In severe cases there will be higher mortality due to cardiovascular failure (flip over).

Expand the brooding area after every 2 days and birds should be allowed to occupy 2/3 (two thirds) of the house by the time they are 10-14 days. The birds should be allowed to occupy the whole house by the time they are three (3) weeks old.

During brooding it is essential to maintain proper ventilation regardless of the cost of maintaining the brooder temperatures. Ventilation is important in removing the ammonia from the house and ensuring that the litter is dry thereby reducing disease challenge. Chicks also require fresh air to grow and be productive.