

Chick Brooding Part 1

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Brooding is a critical phase in the broiler production cycle, therefore it is important to get it right first time every time whenever a poultry farmer starts this journey of rearing broilers or broiler breeders.

So what is brooding in poultry production? The brooding period refers to the period in the life of the chick from day old to around 4 weeks of age. The early days are particularly critical (first week), and extra care needs to be taken.

The key brooding fundamentals to be given special attention to provide a good chick start are:

1. Feed
2. Temperature
3. Water
4. Ventilation

The goal of brooding is to stimulate early feed intake, good flock uniformity and good early start in the growth of the chick. That is, to achieve 4 ½ times the day old weight at 7 days. This goal can only be attained through good management of the above listed brooding fundamentals.

FEED AS A KEY BROODING FUNDAMENTAL

Benefits of Early Feed Intake

Like all young animals, chicks are susceptible to cold and diseases because of the immaturity of its temperature regulating and immune-systems. As such, the first 24 hours after placement a chick needs to consume 20 -25% of its body weight in feed. Once the chick starts eating:

- Digestion starts
- Heat production starts
- Temperature control begins, therefore...
- Risk of chilling and death through cold is reduced
- Immune system starts to develop-ability to fight diseases is boosted.
- Intestinal development starts-key to nutrient absorption and thereby facilitating early growth.

On the other hand, poor early feed intake results in:

1. Reduced weight gain
2. Higher mortality because of increased culling for small non starter chicks
3. Poor flock uniformity i.e difficult to market birds of different sizes

There are therefore different methods of stimulating early feed intake for one to get this brooding fundamental right first time every time. The methods are as follows:

- Place extra plastic, newspapers or khaki paper. This should cover 50% of floor area.
- Place paper or plastic under nipple lines, if using chick founts place on top of paper or plastic.
- Walk every 4 hours through the house, birds will move and feed intake will be stimulated.
- Use crumble or mesh as starter feed. Pellets are too big for chicks to break.

Brooding temperature targets

1. Litter temperature 32 degrees Celsius
2. Floor temperature 28 degrees Celsius
3. House temperature 33 degrees Celsius
4. Under brooders 40.5 degrees Celsius

Lastly feed intake should be evaluated or assessed after 24 hours of placement through performing a procedure called **CROP FILL test**. This involves sampling 100 chicks and 95% of chicks should have their crops with water and feed. The guide is as shown below:

- Feed and water: full pliable crop- this is the ideal
- Feed only: Full hard crop- this is unacceptable

- Water only. Soft full crop- also unacceptable
- Empty. No feed and water- very dangerous

Look out for Part2 as we discuss the remaining aspects of brooding. Meantime don't forget to like or comment if you found this article useful!