**Broiler breeder management.**

Periods of breeding is divided in to:-

1. Brooding period: It starts from one day old up to six weeks, the chicks needs heating and a good feeding diet for rapid growth rate and till the body structure is formed.
2. Rearing period: This period extended from six weeks up to age 23 weeks(161)days and is considered a preparatory period to prepare the flock for egg production season.
3. Egg production period (laying period): It starts from the date of sexual maturity and laying the first egg in the age of 24 weeks and up to marketing the flock at the age of 64 weeks.

**Goals of breeding during the period of growth for the breeders flock:**

1. Delivering the flock to sexual maturity at the age of 24 weeks while maintaining the body weight for the heavy strains to 2640 grams for females and 3600gm for males.
2. To bring the female into lay stimulating and supporting egg production using feed and light. To promote and support female reproduction performance throughout the laying cycle.
3. Delivering the flock to sexual maturity with high homogeneity.
4. The need to obtain sexually matured breeders and has a size appropriate to the structure of the body sometimes the body weight is not the right standard so the international companies recommend a physical measurements as an indicator for the appropriate size.
5. Delivering the flock to the age of sexual maturity with good flesh for the structure of the body and covering the sternum bone with meat muscle is the best indicator.
6. Delivering the flock to the age of sexual maturity and enjoying full health after completion its program to raise protective immunity.

**Administrative procedures required to achieve the targets during the period of growth for the broiler breeders.**

1. Following a specific program of light suit with the type of houses (close or opens sided) and with the breeding season (summer or winter) and upon those program we determine the length of daily lighting and the suitable light intensity.

1. Following a careful program for feed restriction to ensure the control of body weight for both males and females till the sexual maturity.
2. Controlling the body weight of the breeder flock by weight samples of the birds weekly as well as accounted the homogeneity ratio.
3. Following a preventive program includes specific dates for the use of medicines and vaccines in such a way that guarantee the flock from infection during the periods of growth and production.

**Partitioning in breeder houses**

Partitioning of the breeder’s house is very important to separate them into sections or blocks so that each house is divided from inside to 4-5 sections for breeder reared in the group of no more than 700-1000 birds per section with a surface no less than 200 square meters.

**Targets for partitioning the breeder house**

1. Ensure the distribution of rooster’s uniformity to all of the flock and prevent their concentration in one side of the house because this deprives some of the females from insemination and thus reducing the fertility rate.
2. Ensure the distribution of the female’s uniformity on the nests and thus prevent the focus of the females on one side of the house.
3. Facilitate the process of grading the flock depending on the weight and put the weak individuals in a section and the high weights in another section to guarantee the target weight for males and females at age 23 weeks properly.
4. The possibility of separating males and females because it will facilitate the control of weights on each individually with the possibility of using special diets for each sex if necessary, the mixing of males and females is done usually before the sexual maturity.
5. Facilitate the vaccinations by spray or drinking water preventing congestion on the drinkers or disorder all the flock by vaccinations with spray machines.
6. Facilitate the process of isolating the sick birds or that needs special care and return them to the flock after recovery.
7. Ensure the distribution of food during the planned period of growth from one day old to 23 weeks to all of the flocks to get a uniform flock in their weights before entering the egg production period.

**The justification for feed restriction for breeder’s flock during the period of growth:**

If chickens left on free nutrition (*ad libitum*) during the growth period from one day old and up to 23 weeks, it will lead to several negative impacts affecting economic yields and the importance of these effects:

1. Increasing the cost of feeding during the growth period.
2. Increasing the body weights more than the standards weights as a result of deposition of high amounts of fats in the abdominal cavity and internal organs and that leads to reduce egg production.
3. Increasing the floor eggs because the heavy chickens could not reach the nests.
4. The heavy weight males will affect the insemination process and thus will reduce the fertility and hatching rate.
5. High mortalities percentage as a result of excess protein meanwhile it’s not stored like fats and carbohydrates, so the body must get rid of the surplus of it which is causing stress on the body organs like liver and kidney.

**Food restriction systems for broiler breeders flock:**

**A)-Limitation the amount of food per day:**

Usually estimated birds consumption of feed per day start in the first day of hatching and keep this amount of food constant till the 21-22 week with 17% of protein content, also providing the cereals to the birds such as wheat, barley and oats 5 grams per birds scattered on the floor every evening to distract the flock and to turn the litter and strengthen their legs because it’s very important for the success of fertilization.

**The advantage of this method:**

1. The flock is not exposed for fasting days.
2. Decreasing the cases of pecking and cannibalism because providing daily food distracting the flock.

**The disadvantage of this method:**

1. Difficulties in controlling the weights of the flock and difficulties to reach high homogeneity.
2. The great competition deprives the weak birds to get it’s enough of food, so the variation in the weights will occur, therefore it is required to apply the following measurements;
3. Distributing the food quickly within 5 minutes
4. Providing the house with enough feeders.
5. This system does not allow the digestive organs to be developed so they comprehend the capacity of the digestive system to remain low because it deals with a few amounts of feed.

**B)-Every other day feeding or skip a day feeding:**

Shares of two days given in one day and the next day are full fasting, its recommended in the fasting day scattering cereals such as wheat, barley or oats on the litter 10 grams per bird to minimize the effect of fasting.

**C)-Skip two days per week system or 5-days feed 2-days off:**

Providing food five days a week and two days far apart fasting, so it’s called (3-1-2-1 program).