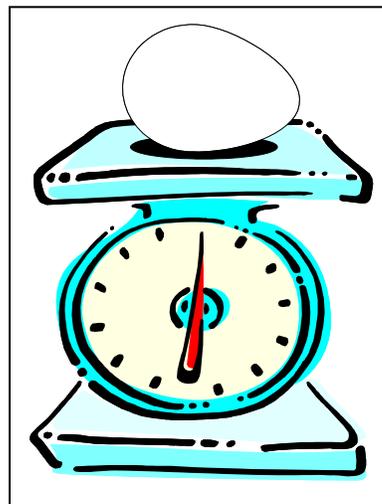


Egg Size and Your Small Flock of Laying Hens

For many people, the ideal laying hen would lay Grade A Large sized eggs from the first day to last day of her production cycle. A Large egg gives you a bigger breakfast than a Medium egg but is less expensive to produce or likely to crack compared to an Extra Large or Jumbo egg. No laying hen, however, can meet the ideal standard of laying a Large egg everyday.

All hens start egg production laying Pee Wee or Small eggs and gradually increase to a mature egg grade size of Medium, Large or bigger. In modern breeds, most hens are laying Large, Extra Large or Jumbo eggs by 40 weeks of age.

While you cannot alter the basic pattern of how egg size changes as hens age, the feeding and management of your hens can have a measurable impact on egg size. The way that you treat your hens will determine how quickly they will start to lay Large, Extra Large or Jumbo eggs.



Important management factors in controlling egg size are:

- 1) **Hen body weight** is the key to increased egg size. Bigger hens produce larger eggs than smaller hens and bigger breeders produce larger eggs than smaller breeders. For modern White Leghorns, rearing pullets that weigh at least 1.35 kg (3.0 lbs.) at the start of egg production will increase both hen weight and egg size.
- 2) **Protein level in the feed** can be used to alter egg size at different stages of production. In the first couple of months of egg production feeding a high, 18% to 20% protein layer ration will increase egg size. After the flock has reached maximum egg production, high protein diets no longer promote large increases in egg size. After 36 weeks of age, feeding rations with 15% to 17% protein will help to slow increases in egg size.
- 3) **Lighting programs** influence egg size by accelerating or delaying the age at which hens start to lay eggs. The younger a hen is when she starts egg production, the smaller her eggs will be during her first year of life. The start of egg production can be delayed by providing 10 hours or less of light each day to 19 weeks of age. Decreasing the daily hours of light at any time after 10 weeks of age will also delay the start of egg production.
- 4) **Skeletal size** has some impact on egg size. Hens with bigger and longer bones tend to become bigger hens and lay bigger eggs. The protein level in the ration fed before 10 weeks of age is the main factor influencing skeletal size of any particular breed of hen. If you want pullets with bigger skeletons, feed a starter diet until 8 or 10 weeks of age instead of just 6 weeks of age.
- 5) **Feed intake** has a direct impact on the hens' intake of nutrients and the size of eggs that they produce. Any factor that limits feed consumption, for example crowding, heat stress or inadequate water supply, will reduce egg size.

These factors have a strong influence on how soon the hens start to lay Large instead of Medium eggs and how many hens will lay Extra Large or Jumbo eggs.