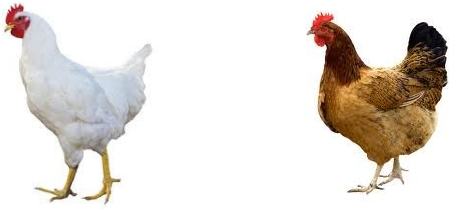


Phase Feeding

Chick Starter feed is fed from day one until 4 to 6 weeks of age depending on body weight. Temperature and environmental conditions greatly impact growth rate. **Pullet Grower** is fed to about 16 weeks of age or when they begin to lay.



It is critical to weigh birds prior to any scheduled feed change. If the flock is below targeted weight, it should be left on the higher nutrient content feed. Sometimes a **Pullet Developer** feed is used starting at 12 weeks, but depending on the weight of the birds. In warm climates, attaining the proper weight at point of lay is critical and developer may not be necessary.

Chick Starter	1-6 wks	2 lb per bird
Pullet Grower	7-16 wks	11 lb per bird
Laying Mash	17-20 wks	14.7 lb per 100 bird/day
Laying Mash	21-70 wks	17.5 lb per 100 bird/day

FEEDING TECHNIQUES

1. Pullets eat more in the morning and rapid consumption in pullets is encouraged to develop a large crop.
2. Layers should have a feeding 2 to 3 hours before lights go out for good shell quality.
3. In hot weather a midnight feeding of one hour will reduce the affect of heat stress and increase production.
4. Top dress the feed weekly with 1/2 lb per 100 birds oyster shell or course limestone to improve shell quality.



Properly debeaked bird

DEBEAK PROPERLY

Beak trimming is carried out to prevent feather pecking and cannibalism and to reduce feed wastage. It is a operation and should be performed by specially trained personnel. Poor beak trimming leads to unevenness and difficulty with feeding and drinking. Beaks should be trimmed lightly at 10 days of age. A second debeaking is recommended between 8 to 10 weeks of age. Do not debeak sick birds. Provide a greater depth of feed in the feeders for several days following the procedure.



Improperly debeaked

EGG SHELL COMPOSITION

A hen lays about 250 eggs per year corresponding to 20 times the calcium in her bones at any time, so, the requirement for calcium is great. It takes about 20 hours to form the shell. In those 20 hours the hen puts on about 4 grams of calcium carbonate.

The thickness of an egg shell depends on the amount of time it spends in the uterus and rate of calcium deposition. As the bird ages the thickness of the shell declines. Also the size of the egg increases as the birds age and the surface area is increased.

Egg shells have thousands of pores and bacteria can invade the interior of an egg. Cleanliness and proper temperature storage are important to maintain quality.



The color of egg shells depends on the breed of the bird. In general, white hens lay white eggs, brown birds lay brown eggs. The brown color of the shell will lighten as the bird ages. The pigments are formed by the epithelial cells of the uterus. These brown pigments are added to the shell in the last 3 to 4 hours before the egg is laid. The pigments may not be uniform especially if the birds are stressed during this time.