MANAGEMENT UPDATE

Light. Your chick is now 16 weeks of age. At 18 weeks of age you can stimulate your pullets to come into lay by increasing the amount of light they receive each day.

In commercial operations, pullets are provided with 8 hours of continuous light per day until they are 18-20 weeks of age. At 18-20 weeks of age the hours of light are gradually increased (0.5 hours/week) until 14-16 hours per day are achieved. After that light duration is maintained constant. Pullets usually start egg production within 4 weeks of increasing the amount of light.

Gradually increase the amount of light your pullet receives each day so that by 20 weeks of age they are receiving 12-14 hours per day.

Feed. Rapid development of the egg yolks, in preparation for egg production, starts about 2 weeks before egg production begins. It is necessary, therefore, to provide an adequate diet to meet the increased nutrient demand at least two weeks prior to bringing pullets into egg production. When you start increasing day length, you should also gradually switch to a layer diet.

Nest box. Your pullets should have access to a nest box. If pullets are allowed to get used to having a nest box before they start laying eggs, they are more likely to use it and you will have less problems with broken eggs.

If you have cockerels, you have three choices. You can slaughter it for a meal (not a likely choice if he has become a pet but if you decide to, instructions are included), sell him at a local market, or keep him for breeding and show (or simply as a pet).

If you decide to keep a cockerel, it is not necessary to worry about day length, you can continue feeding a grower diet, and of course you do not need a nest box. Physiological response of males to light is similar to that of females in that it stimulates sexual development. Males may respond more slowly than females, however.

INTERIOR EGG QUALITY

When an egg is laid it is at the same temperature as the hen’s body (about 105°F). As the egg cools to ambient temperature, the egg contents contract and the two shell membranes separate, generally at the large end of the egg, forming the air cell. During storage, the egg loses water by evaporation, causing the air cell to enlarge.

When a stale egg or an egg of poor quality is broken out, the egg white will spread or flatten out. The yolk will be flat and very easily broken. Eggs of good quality will have a firm, thick albumen that is compact and upstanding. The yolk will stand up and be round in appearance.

You can check the interior quality of your eggs by holding them up to a light (candling). Eggs that are stale or of poor quality will have a large air cell and the yolk will be more visible and mobile. A meat or blood spot will show up as a dark or foreign substance in the albumen.
You can make yourself a candler from either a flashlight or a tin can. You can make an inexpensive candler using a tin can like a coffee can or a cylindrical box. The light source could be a 60 watt bulb or a strong flashlight. Feel free to use other plans or invent your own candler model.

**Flash Light Candler**

![Diagram of Flash Light Candler]

**Coffee Can Candler**

![Diagram of Coffee Can Candler]

**HOW TO CANDLE**

Hold the egg up to the candling light in a slanting position. You can see the air cell, the yolk and the white. The air cell is nearly always in the large end of the egg. Therefore, put the large end next to the candling light.

Hold the egg between your thumb and first two fingers. Then by turning your wrist quickly, you can cause the inside of the egg to whirl. This will tell you a great deal about the yolk and white.

When you are learning to candle, you will find it helpful to break and observe any eggs you are in doubt about.

The depth of the air cell is the distance from its top to its bottom when the egg is held with the air cell up. In a fresh egg, the air cell is small, not more than 1/8-inch deep. As the egg ages, evaporation takes place and the air cell becomes larger and the egg is downgraded.

**WORD SEARCH**

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Air cell
Albumen
Blood spot
Candler
Egg
Egg white
Meat spot
Membranes
Shell
Yolk

Jacquie Jacob, poultry extension coordinator; Ben Mather, poultry extension specialist; Andy Toelle, county extension agent.