



Caring for Your Small Poultry Flock

Brooding

The **brooding period** occurs during the first few weeks of a chicken's life, and is perhaps the most labor-intensive period of your chickens' lives. During this time they are rapidly growing, and therefore are most susceptible to environmental changes and stress. Care provided during this period will determine the long-term success of your new flock.

Chicks are unable to maintain their own body temperature, and will require supplemental heat, which is provided by a brooder. An acceptable brooder would be a small section of the coop which can be enlarged as the chicks grow, starting with one-half square foot per bird. The coop also needs to be able to protect the chickens from inclement weather and predators throughout their lives. Common predators include dogs, cats, raccoons, weasels, foxes, birds of prey, and opossums. Supplemental heat can be provided by hanging a heating lamp over the brooding area. The height of the lamp must be adjusted so that the floor beneath the lamp is kept at 95°F. There must be sufficient space for the chicks to move away from the lamp if they get too warm. Red-tinted lights are recommended to help prevent feather picking and cannibalism. After the first two weeks, you can begin to wean the chicks off of the supplemental heat, decreasing the temperature 5°F per week by raising the lamp in small increments. If your chicks are huddling together or are peeping loudly, this suggests that the temperature in the brooder is too cold. If all of the chicks are staying as far away from the heat source as possible, the brooder is too hot and the lamp should be raised.

Chicks need an energy- and nutrient-rich diet. A commercially-prepared chick starter containing about 24% protein is appropriate. While your chicks are acclimating to their new environment, the feed should be placed in shallow trays next to the feeders. The trays and feeders should be emptied and cleaned daily to prevent fecal contamination of the feed. When your chicks are about three to four weeks old, they can be switched to a commercially prepared grower diet, containing around 18-20% protein. Fresh, clean water should be available at all times throughout your chickens' lives. The best method to provide water for the chicks is to utilize bottle waterers to prevent small chicks from drowning.

Wood shavings are a common bedding choice for brooders, however; if your chicks are less than five days old, the litter should be covered with paper towels until they develop stronger legs. The litter should be kept clean and dry to reduce the chicks' exposure to germs and to help prevent chilling.

Growth and Production

Once your chicks are around five to six weeks old, they should no longer need supplemental heat and will be ready to have free-range of their whole coop. Chickens prefer to roost above the ground, so perches should be available. A 2"x4" wooden board, suspended 18 inches off the floor, broad side up, is ideal. Enough perch space should be provided so that all the chickens are able to be on the perch at the same time. Not only will the availability of a perch make your coop more comfortable for the chickens, it will also help control disease transmission since they will not have as much contact with their feces. The coop should be cleaned regularly to avoid accumulation of feces and feed waste.

At around 16 weeks of age, your chickens should be nearing egg production, and should begin to eat a commercially-prepared diet formulated for laying chickens containing around 16% protein. These layer diets contain higher levels of calcium to ensure good eggshell quality and bone health. You will

also need to supply supplemental calcium, commonly in the form of crushed oyster shells or dicalcium phosphate. These products have the added benefit of assisting the bird digest their feed, and can take the place of the small stones that a foraging chicken would ingest.

Egg production depends upon many factors, including age and breed of the birds and day length. Once your birds begin to lay eggs, production levels will be highest in the spring and summer, will slowly taper off in the fall, and may completely cease during the winter months. If you want to ensure a constant supply of eggs throughout the year, supplemental light can be provided for a total of 14-16 hours of light a day. As egg production decreases, you may notice that your chickens begin to lose their feathers; this process is known as molting and is a normal consequence of decreasing light levels and is a period of biological rest for the bird. One might think of this as the bird's way to "reset" itself prior to entering high levels of egg production.

Keeping Your Flock Healthy

Rather than focusing on the treatment of disease in your flock of chickens, you should try to prevent disease. Not only will this help ensure a constant supply of eggs, but it is also more effective due to the lack of medicines available for egg-producing chickens. Important principles of disease prevention include cleaning, disinfection, and isolation of your flock from other flocks. Cleaning should especially focus upon removal of feces, and should be followed by disinfection of clean surfaces; an acceptable disinfectant is a 10% solution of chlorine bleach in water. Isolation of your flock includes quarantining any new birds for at least 30 days to ensure that they are free from disease, not sharing equipment between flocks, and changing shoes and clothing if you are visiting other flocks. Some diseases affect one species but can be carried by another species without causing any signs of disease, so only one avian species should be kept on any property; this is especially true of chickens and turkeys.

Signs of disease in chickens are relatively non-specific and may include depression (birds not moving around much, huddling together), difficult or noisy breathing, standing in odd positions, or diarrhea (often seen as caking of droppings under the tail). Often, the first sign of disease is decreased egg production, or decreased feed and water consumption. If you notice any of these in your chicken flock, you should contact your veterinarian or the University of Pennsylvania Poultry Diagnostic Laboratory.

As with any type of animal, birds may carry certain diseases that can be spread to humans, so it is essential that you wash your hands after you handle your chickens or their feces or after collecting eggs. Hand hygiene is especially important for children or if you have been handling sick or dead birds.

Suggested Reading

Storey's Guide to Raising Chickens, 3rd Edition, by Gail Damerow, Storey Publishing, North Adams, MA

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