

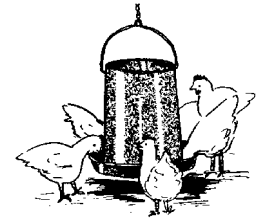


The University of Georgia

Cooperative Extension Service

College of Agricultural and Environmental Sciences / Athens, Georgia 30602-4356

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BACKYARD FLOCK TIP...

KEEP FEED "HEALTHY" IN THE SUMMER

The hot summer months are a real challenge for those producing poultry, either on a commercial scale or in backyard flocks. Chickens can tolerate a cold environment much better than a hot one. For this reason, it is commonly recognized that during the summer we must provide an ample supply of cool, fresh water and places for birds to get out of the sun. However, little attention has been given to the fact that hot, humid summer conditions also create problems for feed quality.

High Temperatures

Most people recognize the inverse relationship between food stability and temperature. The higher the temperature, the more rapidly we expect food to deteriorate. Humans instinctively know that food quality can be preserved for longer periods of time at low temperatures. The introduction of refrigeration technology in this century has largely replaced traditional preservation techniques such as drying and salting.

In the case of poultry feed, high temperatures can also be associated with shorter "shelf life". Chemical reactions proceed more rapidly at higher temperatures. Deterioration processes, such as the fat in feed becoming rancid, proceed at much higher rates once temperature exceeds 85 degrees F. In addition, feed takes on a "stale" odor much more quickly in the summer than in the cooler winter months. The poultry producer should make every effort to keep feed in a place where temperatures do not become excessive. The commercial producer with a metal bin exposed to sun is less able to do this efficiently. However, on large commercial farms feed is frequently delivered several times per week. The backyard producer, on the other hand, may have purchased an amount of feed which will last for several weeks. This is plenty of time for feed to go out of condition and lose nutritive value if kept in a hot place, such as a metal storage shed.

PUTTING KNOWLEDGE TO WORK

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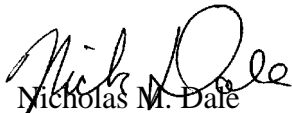
The Problem of High Humidity

High levels of moisture also lead to rapid deterioration of poultry feed. It is well known that the reduction or elimination of moisture leads to greater stability. The drying of meat and vegetables has been practiced for thousands of years to slow deterioration. Unfortunately, the warm summer conditions in the southeast are usually accompanied by high levels of humidity. This humidity can lead to a rapid decline in the quality of poultry feeds.

One of the chief dangers involved in handling feeds with high humidity is the proliferation of molds. Many molds begin to grow rapidly when moisture content exceeds 13 or 14%. Some of these molds have been known to produce toxic substances, known as mycotoxins. The most commonly mentioned of these is aflatoxin, which has a very deleterious effect on the health and growth of poultry. Insect infestation is also much more likely when the moisture content of feed is above 12 to 14%. The stale odor of poultry feed mentioned above is much more likely to develop at higher humidity.

What Should We Do?

There are several simple steps that can be taken during the summer months to improve the stability of poultry feed. First, smaller quantities should be purchased than at other times of the year. This will ensure an increased freshness of feed (assuming the feed store makes purchases which assure a frequent turnover of product). If the feed is to be kept on the premises for extended periods, a cool place should be sought. Opened bags should be folded down after each feeding and kept in a container with a reasonably tight fitting lid. Finally, care should be taken to provide only a limited amount of feed each day. Feed left in feeders for several days during the hot summer months can gain humidity, become moldy, and rapidly go out of condition.



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****Consult with your poultry company representative before making management changes.****

“Your local County Extension Agent is a source of more information on this subject.”