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Raising poultry the organic way—

disease control and feeding

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COLORADO STATE UNIVERSITY EXTENSION SERVICE

Quick Facts

Most small poultry producers have far fewer health problems with their livestock than commercial enterprises.

Birds raised with adequate space, proper diet and good sanitation usually are healthy.

Organically grown feeds can be obtained by growing corn, millet, sunflower seeds or other grains or by feeding garden "waste" and clean kitchen refuse.

Free-ranging chickens make up a good portion of their animal protein needs from insects and worms.

As in all phases of feeding, suggested formulas are only guidelines; substitutions are the rule rather than the exception.

The important thing to remember when feeding poultry is to meet the protein, vitamin and mineral needs of the stock.

Author's Note: While I have in no way developed an expertise in this art, the following aids are presented for persons who, for one of many reasons, may need to raise poultry for meat and/or eggs the organic way. I have extensively reviewed several sources of material. Organic Gardening and Farming is an excellent source of popular and new emerging ideas, and I would suggest this magazine if you care to subscribe; on the other hand, it does not satisfy the need for immediate comprehensive references. I recently learned of a book titled The Homesteader's Handbook to Raising Small Livestock by Jerome D. Belanger. In the book, the author describes chickens as "the most common homestead animal," and I believe that this sourcewhile not the only one-is a valuable reference for persons needing specific help to manage poultry the organic way.

The following is reprinted from The Homesteader's Handbook to Raising Small Livestock, copyright 1974 by Rodale Press Inc., with the permission of Rodale Press Inc., Emmaus, Pa. (For more information, see Service in Action sheet 2.508, Raising poultry the organic way—management and production.)

Chickens are heir to so many diseases that it's a wonder any of them ever reach maturity. Reading most books on poultry raising is more like taking a short course in veterinary medicine than a course in chicken raising. Most homesteads have far fewer health problems with their livestock than commercial enterprises. One of the big reasons, undoubtedly, is the less crowded conditions on the homestead along with the smaller numbers of a given species. Crowding and mass production not only invite problems, they also make those problems harder to control.

Cannibalism

In all the years of raising chickens (by the author), the only one real persistent problem has been cannibalism. It usually starts about the time pin feathers begin to appear on young birds. There can be many causes, but once started it becomes a bad habit and as a habit is difficult to control even if the cause is removed. Some of the more common causes of cannibalism are crowding, boredom, too much heat, too much light and improper diet. Birds that are allowed to roam, which is the ideal of the organic chicken farmer, obviously are less affected by any of these factors.

The whole problem starts when one chicken starts picking at another, usually in the vent region. She draws blood, and pretty soon all other chickens are picking at the poor thing. It doesn't take long for the flock to kill her and to keep on picking until all that's left is a rather ghastly mess. They then usually start on another one.

Many chicks are sold as "debeaked," which means a portion of the beak has been snipped off with a special hot blade that cuts and cauterizes at the same time. These debeaked chickens seldom turn cannibalistic.

The author found, however, that the best solution to cannibalism is the application of pine tar. At the first sign of picking, spread pine tar on the affected area. There is even a blood-colored pine tar made for the purpose, but black works just as well. The birds keep on picking but find out the taste is awful, and they soon find some other way to amuse themselves. The picking has to be caught early for this treatment to be effective.

Disease Control

The author did not have any personal experience with any other major problems or diseases in chickens, and judging from letters received from hundreds of other homesteaders, neither do they. This is attributed to the conditions under which birds are raised—adequate space, proper diet and good sanitation. This is in sharp contrast to practices by commercial growers who medicate both feed and water as a matter of course because they know they'll have trouble if they don't.

One other factor that's important in disease control is an "all-out—all-in" policy. New layers should not be put in the same house with older birds. The used-up layers are butchered, and everything is carefully cleaned, disinfected and aired before the new batch comes in However, the author states that he has violated even this basic rule with no problems. After all, he said, Mother Nature doesn't sweep off the earth after each generation.

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If disease should strike the home flock, the best thing to do is to immediately isolate any affected birds, then contact the county agent for advice. Health problems seem to be minimal in small flocks raised organically. There will be mortalities, but that does not mean an epidemic. Any sick or dead birds should be disposed of immediately to avoid spreading a disease.

Chicken Feed

Feeding organically grown grains, once again, is one of the major hurdles for the organic homesteader when it comes to raising a poultry flock. While it is possible to get commercial feeds without medication or additives, some people want the added assurance that the feed their birds get has been grown on organically fertile soil, without chemical insecticides, herbicides or fertilizers. In most areas today, this still is a big order unless you can grow your own. However, the homesteader who has a little room for planting will fare far better with chickens than with larger stock, if only because a small chicken eats considerably less than a large sow!

Growing Your Own

Corn, for example, can be grown on a small plot. Small quantities of corn are easily harvested and husked by hand, and hand shellers are available at low cost. The amount of labor involved might not be tolerable for such stock as hogs or goats, but for some people at least it could be recreation in connection with a few chickens.

Some grains, such as millet, can be stored without threshing. During the winter, a small bunch of the stalks can be tied head down from the rafters in the henhouse, just high enough so the birds have to stretch to reach the grain. This provides exercise and good food, too.

Sunflower seeds can be removed from the flower heads by rubing them over a coarse screen. Fed whole to chickens, they are an excellent source of protein.

Many other crops grown on most homesteads are acceptable chicken feed, along with much garden "waste" and clean kitchen refuse—vegetable trimmings, dry bread, and don't forget crushed egg shells as an important source of calcium.

It has been said that people who, during the Depression when they couldn't afford commercial chicken feed, kept a close watch on highways for wildlife fatalities. The possums, squirrels, gophers and other such animals killed by cars were brought home for the chickens when meat scraps weren't available.

Free-ranging chickens make up a good portion of their animal protein needs from insects and worms, which is a graphic example of how organic farming works. The chickens not only save the farmer money by finding their own protein (the most expensive ingredient of a feed ration), but they also help keep down the insect population at the same time.

Feed Rations

Here are two rations suggested by Organic Gardening and Farming that can be compounded on the homestead:

Starter and Growing Mash

(about 20% protein)

(assures process)	
45 lbs* shelled corn	2 lbs.* meat scraps
15 lbs. oats	2 lbs. wheat germ
10 lbs. soybeans	2 lbs. brewers yeast
12 lbs. barley	1 lb. bonemeal
2 lbs. fish meal	2 lbs. kelp
7 lbs. alfalfa meal	•

Laying Mash

40 lbs.* shelled corn	2 lbs.* meat scraps
15 lbs. oats	2 lbs. bonemeal
15 lbs. barley	1 lb. ground limestone
10 lbs. soybeans	2 lbs. linseed meal
4 lbs. alfalfa meal or	2 lbs. kelp
dry hay	2 lbs. fish meal
2 lbs. wheat germ	2 lbs. brewers veast

1 lb. charcoal

*(To convert to metrics, use the following conversion: 1 pound = .45 kilogram)

Mash is feed that is ground. Grinding it may present another possible problem for the small farmer. Very small amounts can be ground in small hand grinders, but it's a time-consuming job—one that will effectively increase the cost of homegrown meat and eggs. But a farm-sized grinder—at least a new one—will cost thousands of dollars. A feed mill will do the grinding if the farmer has a reasonable amount ground at one time.

There are two main reasons for grinding feed. It increases feed efficiency for one thing, but of more importance to the homesteader it keeps an animal from picking out what it wants to eat at the expense of what it should eat, much as a child would do.

Scratch feed is not ground, but as the following suggested formula shows, it does not contain all the minerals a chicken needs.

Scratch Feed

Scratch Feed		
35 lbs.* cracked corn	25 lbs.* oats	
25 lbs. barley	15 lbs. sunflower seeds	
*(To convert to metrics,	use the following conversion:	
1 pound = .45 kilogram.)		

As in all phases of feeding, suggested formulas are only that. Substitutions not only are permissible, they are also the rule rather than the exception because feed formulas must be based on geographic area, price and availability of various ingredients. The important thing is meeting the protein, vitamin and mineral needs of animals of a given class and age.

Grit is an essential item for all birds of any age. Ranging birds will seek their own, but it must be provided for confined birds. Grit is the small stones that end up in a toothless bird's gizzard to grind up its food. Be sure to use chick-size grit for chicks in brooders.

Another item of importance is oyster shell, which contains the calcium needed to manufacture egg shells. Grit and oyster shell are fed free-choice; that is, the birds have constant access to them from hoppers.