



Basic Feeding Programs for Small Chicken Flocks

Chicks will double their weight four to five times in the first six weeks of life. This tremendous growth demands proper nutrition. A commercially prepared chick starter - or "crumble" - is the best way to provide a complete nutritional package at all times. In the first six weeks, feed consumption will be approximately 1 kg for each egg-producing chick and 4 kg for each meat-producing chick. The starter should contain a coccidiostat to stop intestinal damage caused by one of the common types of chicken parasites.

The most common cause of problems in small flocks is failure to provide a commercially prepared starter feed. The second most common problem is failure to use a fortified supplement in the correct proportions when grain is added to the diet on the farm. Without a nutritionally balanced ration, birds will suffer from poor feathering, slow growth, increased fatness and leg problems. It is not possible to produce a properly fortified diet by using just grain, peas or canola. To make a good feed from "scratch", you must use ingredients such as soybean meal, salt, and concentrated vitamins/minerals.

If you keep birds for egg production, a source of calcium such as limestone or oyster shell must be included in the diet or in a hanging feeder. Failure to provide calcium can result in thin-shelled eggs, lost egg production, cannibalism and egg eating. Feeding eggshells as a calcium source is not satisfactory because of the poor digestibility of the shells. Laying hens need about 4% calcium in their diet and you would need to feed a hen two to three egg shells everyday to meet this requirement. Feeding laying hens with a mixture of just grain, peas or canola seed will not provide adequate protein quality to maintain egg size and production. Some soybean or canola meal is needed as a protein source. Mixing a 35 to 40% protein supplement in the correct proportions with your grain will produce a balanced 16 to 19% protein layer ration.

Poultry can be fed a wide variety of grains and will perform well when the grains are included in a balanced ration. Young birds can be fed wheat, oats or barley although it is best that the oats or barley be limited to 25% of the starter diet. After six weeks of age, the birds can be fed rations with oats or barley as the whole source of grain, especially if they have been previously exposed to moderate levels of these grains (about 25% of the diet). Poultry of any age can be fed hard red, durum, extra strong or utility wheat. You may notice wetter droppings when feeding the utility wheat fed to young birds. Rye can be gradually introduced after six weeks of age and used as half of the grain in laying hen diets. Rye containing ergot cannot be used. Screenings are normally acceptable for poultry if they contain 75% or more wheat and cracked wheat. Some screenings contain weed seeds that can cause off colors and flavors in eggs. Grain can be fed to poultry in pelleted, ground or whole form. If using whole grain, it is best to train the gizzard to grind the grain by feeding 20% whole kernels for three weeks before including a high level in the diet (50 to 60%). Whole wheat, barley and oats have been successfully used with poultry.

Peas can comprise as much as 20% of the ration; however, they do not contain sufficient amino acids to meet all of the bird's protein requirements. Peas also contain some anti-nutritional factors that can interfere with digestion. Fava beans can be included at a 10% level in diets fed to young birds but should not be used in laying hen rations because they can cause reduced egg size and egg yolks that break easily. Canola meal is a reasonably good protein source but canola seed, due to its high fat content, should be limited to 10% of the diet. Canola seed is difficult for the bird's gizzard to grind properly; the seed should be ground with some grain in a hammer or roller mill prior to feeding it.



Poultry poorly digest the protein and fiber in grasses and legume hays. They can extract some vitamins but not enough to meet their requirements. Providing grit does not significantly improve the digestibility of these roughages. Feeding alfalfa or grasses will darken egg yolks.

Some suggested feeding programs for small chicken flocks include:

1. Broilers (1.8 kg body weight at 6 weeks of age):

a) Commercially prepared broiler starter, grower, and finisher. Use a coccidiostat in the starter and grower. Follow your feed supplier or veterinarian's recommendation for coccidiostat in the finisher. A broiler chicken will eat about 1 kg of starter, 1.5 kg of grower and 1.5 kg of finisher to reach market weight.

2. Roasters (4 to 4.5 kg body weight at 10 to 12 weeks of age):

a) 0 to 3 Weeks:

1) Commercially prepared 18 to 21% protein chick starter. Provide approximately 1 kg of starter per bird in the first three weeks. The starter should contain a coccidiostat.

b) 3 to 8 Weeks:

1) Commercially prepared 15 to 18% grower (about 5 kg per bird) with coccidiostat

OR....

2) Grain mixed with a 35 to 40% protein supplement with coccidiostat. Typically, 150 kg of supplement is mixed with about 850 kg of grain. Normally, you should not add the extra oyster shell or limestone that is used with laying hen supplements. Consult your feed supplier for complete mixing directions and instructions. Use the different grains, (wheat, barley etc.), as described previously in this factsheet.

c) 8 Weeks to Market:

1) Commercially prepared, 15 to 16% protein, un-medicated finisher (3 to 6 kg per bird)

OR....

2) Grain plus un-medicated supplement mixed at levels similar to three to eight weeks of age

3. Laying Hens

a) 0 to 8 Weeks:

1) Commercially prepared 18 to 21% protein chicken starter with coccidiostat

b) 8 to 18 Weeks:

1) Commercially prepared 14 to 16% protein grower ration **OR....**

2) Grain mixed with a 35 to 40% protein supplement. Typically, 150 kg of supplement is mixed with 850 kg of grain. Consult your feed supplier for complete directions. Use the different grains, (wheat, barley etc.), as described previously in this factsheet.

3) If birds are to be housed on the floor when in egg production, do not use a coccidiostat in the complete feed or supplement at this time. You want the birds to develop resistance to coccidiosis during this period if they are to be kept on the floor while in lay. If the birds are to be housed in cages, a medicated or un-medicated ration can be used, as coccidiosis is not normally a problem once birds are caged.

c) 18+ Weeks:

1) Commercially prepared 16 to 19% protein laying hen ration **OR....**

2) Grain mixed with a 35% to 40% protein supplement. Typically, mix 250 kg of supplement, 80 kg of limestone or oyster shell plus 670 kg of grain. Consult your feed supplier for complete directions.