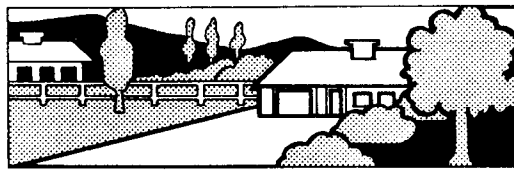
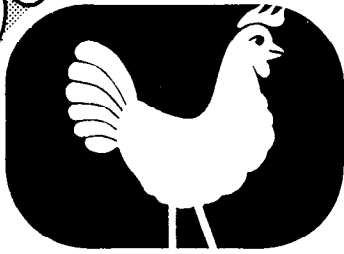


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FEEDING CHICKENS

The simplest way to feed a small flock of chickens is to purchase complete rations --mashes, pellets, or crumbles--from a feed store. These complete feeds provide nutritionally balanced diets for your birds. However, be sure to get the correct feed for the age and type of chickens you want to feed. Some common feeds are shown below:

<u>Feed</u>	<u>Protein Level(%)</u>	<u>Age of Birds</u>	<u>Feed Intake/ 10 birds/age period</u>
<i>Laying Chickens</i>			
Chick starter	20-22	0-6 weeks	20-29 lbs
Pullet grower	14-16	6-20 weeks	120-130 lbs
Layer	15-18	20 weeks on	18-24 lbs/wk
All-purpose	16	All ages	--
<i>Meat Chickens</i>			
Broiler starter	20-24	0-6 weeks	30-50 lbs
Broiler finisher	16-20	6 weeks until slaughter	16-20 lbs

For layers it is usually better to use the special feeds for each age rather than the "all-purpose" feed. After replacement pullets are 14 weeks of age, you may wish to feed a half-pound of corn, wheat, milo, barley or other grain per 10 pullets daily in addition to the pullet grower fed free choice, if grain is cheaper.

For meat chickens, you should buy broiler starter and finisher, which are high in protein and energy. However, many stores do not handle these feeds and you may have to feed starter and grower rations designed for laying chickens. The layer feeds will not give as rapid growth or as low feed to meat ratios.

Pasture

The amount of complete feed consumed may be reduced by supplementing with pasture or lawn clippings. Young, tender plants provide valuable nutrients for chickens, but old, fibrous plants are not well digested and are of little value. Don't feed clippings from lawns if pesticides have been recently applied. Chickens may begin pasturing at any age as long as weather is favorable.

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Whole Grain

Feeding too much grain will make your hens overly fat. When a complete 15% protein laying feed is used, do not feed more than 1/2 pound of grain per 10 hens daily. A 20 to 22% protein laying feed can be used with grain fed free-choice in separate feeders or spread on the ground (1 1/4 pounds of grain for every 10 hens daily). Supplementing the complete ration with grain is most economical when low cost local grain is available.

Feeding whole grain by spreading it on the litter induces hens to scratch in the litter and maintain it in good condition.

Table Scraps

Table scraps, garden products and surplus milk can be useful feed supplements to reduce costs. Feeding should be limited to amounts which your birds will eat in 10 to 20 minutes. Peelings, stale bread, and leafy vegetables such as cabbage, cauliflower, turnips, are useful. Avoid strong materials such as onions unless you relish onion flavored eggs. Don't feed spoiled or moldy feeds or foods. Fresh or sour milk is a valuable feed. Put it in plastic, glass or enamel containers, as the lactic acid formed will rust galvanized containers.

Grit

If chickens are fed whole grain or green forage, they should also receive insoluble grit. Grit is available in chick or hen size. Continuous feeding is not necessary, but grit should be available free choice, 2 or 3 days per month. Fine gravel is an acceptable substitute for purchased grit.

Calcium

Laying hens require large amounts of calcium for egg shells. An effective way to provide it is by free-choice feeding of oyster shell or calcium grit. Also, egg shells can be saved, washed, dried, crushed and fed back to the hens. Wet shells should not be fed because there is a danger of bacterial growth on the residual albumen. There also is the risk of induced egg eating.

Laying mashes containing 2 1/2 to 3 1/2% calcium supply enough calcium, *if they constitute the entire ration* (no pasture or grain). Growing chickens require only about 1.2% calcium in their feed. If you use the higher calcium laying feeds for growing chickens, kidney damage can result.

Pellets

Commercial feeds are often available as pellets for adult chickens or crumbles for young chickens, at a slightly higher cost. Pellets and crumbles are very acceptable but usually have little advantage over mash. They may reduce waste or wind loss, are less dusty and will not separate during shipment.

Medication

Medicated feeds are sometimes useful. Drugs to prevent coccidiosis, a common disease of poultry that causes sickness and sometimes death, are recommended for

growing birds up to 16 weeks of age. These drugs can be purchased in a medicated feed. The medicated feed should be discontinued before egg production starts and at least 5 days before slaughter of chickens for eating. Some drugs or antibiotics can be used safely for laying hens and don't need to be withdrawn before slaughter. *Always check the labels on drugs or medicated feeds before using them.*

Feed Storage

Feed should be stored in a dry, vermin- and rodent-free area. A clean metal or plastic garbage can works well. Always use old feed completely before adding more to the can. Prolonged storage causes rancidity and destroys vitamins.

Feeding Suggestions

Chickens require different sized feeders as they grow. The top edge of the feeder should always be at the same height as the backs of your chickens to allow them to eat comfortably. Troughs should not be filled over half full with feed to avoid excessive waste. Have birds over 6 weeks of age clean up all of their feed daily. This will keep the feed fresh, and your birds will get a balanced diet.

Feeders should be big enough to hold a day's feed. You should provide 4 inches of eating space for each adult chicken (a trough 4 feet long has 8 feet of eating space, adequate for 24 adult chickens). If litter or droppings get into the trough, clean it daily. This condition usually indicates a feeder which is improperly adjusted for height or is too small.

Water

Chickens need a constant supply of fresh water. Locate the water in the shade and clean the container daily. Your flock will drink about twice as much water during hot summer weather as during cooler weather. To prevent mortality from high temperatures, be sure that your birds do not run out of water. Provide waterers with adequate capacity and check them regularly.

If a pressurized water system is available, you may consider using an automatic waterer. The cost is reasonable, labor is saved, and a constant supply of fresh water is ensured.

Water for poultry should be clean and free from disease organisms or excessive levels (over 2800 ppm) of salts.

Home-Mixed Feed

Home mixing of poultry feed for small flocks is discouraged. Home-mixed feed may not equal commercial feed in quality and it is usually easier and less expensive to buy feed from feed stores or mills. Large mills have lower production costs due to larger volume purchases of ingredients and efficient milling and mixing facilities. On the other hand, sacking and retailing costs are high, so those who have access to home-grown feedstuffs may be able to save money by home mixing. Others may prefer their own mix regardless of cost. To make a cost comparison, calculate the total ingredient cost of home-mixed feed. Be sure to add the value of any home-grown grains used. (Don't overlook the alternative of feeding grain with a high-protein laying feed.)

GENERAL FORMULAS FOR HOME MIXES

	lbs/100 lb/mix ^a		Layer
	Starter	Grower	
Coarsely ground grain (<i>Corn, milo, barley, oats, wheat, rice, etc.</i>)	46	50	53.5
Wheat bran, mill feed, rice bran, milling by-products, etc.	10	18	17
Soybean meal, peanut meal, cottonseed meal, sunflower meal, safflower meal, sesame meal, etc. (<i>Soybean meal is the preferred protein source. Cottonseed meal should be egg-tested type low in gossypol.</i>)	29.5	16.5	15
Meat meal, fish meal (<i>If meat meal or fish meal is unavailable, soybean meal may be substituted.</i>)	5	5	3
Alfalfa meal (<i>Can be eliminated if fresh pasture is available.</i>)	4	4	4
Yeast, milk powder (<i>Can be eliminated if the vitamin supplement is properly balanced.</i>)	2	2	2
Vitamin supplement (<i>Must supply 200,000 I.U. vitamin A, 80,000 I.C.U. vitamin D₃, 100 mg. riboflavin.</i>)	+	+	+
Salt with trace minerals (<i>Trace mineral salt or iodized salt supplemented with 1/2 oz. of manganese sulfate and 1/2 oz. of zinc oxide.</i>)	0.5	0.5	0.5
Bone meal, defluorinated dicalcium phosphate	2	2	2
Ground limestone, marble, oyster shells (<i>Oyster shell and grit should be fed free choice to layers.</i>)	1	2	3

^aUse a combination of ingredients in each category, if possible.

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture, Jerome B. Siebert, Director, Cooperative Extension, University of California.