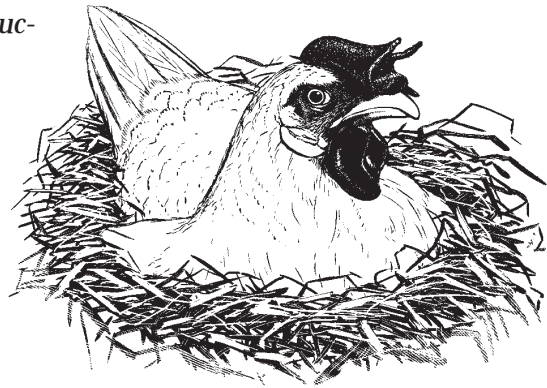




# How to feed your laying and breeding hens

J.C. Hermes

**T**here is no magic to feeding chickens. Small flock producers can choose from many brands of feed produced by several manufacturers. These manufactured feeds are computer formulated by company nutritionists to provide optimal nutrition for the particular type and age of chicken being fed. The formulation of these feeds, which is similar to commercial feeds, is based on years of research on commercial chickens. They are considered a complete diet, containing all of the nutrients required by chickens. In most cases, supplemental vitamins are unnecessary if these feeds are fed exclusively.



Feeds are formulated and manufactured for chickens to meet their nutritional needs at specific ages and production characteristics. For example, starter feeds are fed to chicks from hatch to a few weeks of age. Grower and developer feeds are fed to “adolescent” growing chickens, while layer or breeder feeds are fed to chickens that are producing eggs.

The ingredients in these different types of feeds are similar; however, the proportions vary to provide the proper level of nutrition for the particular birds being fed. Each sack is labeled with its specific use.

It is important to feed egg producing chickens the appropriate feed from hatch through their productive years to maximize their productivity. Feeding improperly at any stage can result in poor egg production.

Whether they are bantams or large fowl, white or brown egg

layers, all chickens' requirements for protein, carbohydrates, fats, fiber, vitamins, and minerals are similar. Your birds rely on you to provide them with proper feed. If you do, they will produce many high quality eggs for the family, friends, the neighborhood, and beyond. Following a few simple feeding rules can lead to a healthy and productive flock.

## Starter feeds

Feed newly hatched chicks a starter diet until they are about 6 weeks old. Starter diets are formulated to give proper nutrition to fast growing baby chickens. These feeds usually contain between 18 and 20 percent protein.

It is not necessary to feed “meat bird starter” to young layer chickens. Diets formulated for starting meat chickens are higher in protein (22 percent) to maximize growth, which is not

necessary or desirable for egg laying chickens and is higher in cost.

## Grower and developer feeds

Once the birds reach about 6 weeks of age, substitute a grower feed for the starter. Grower feeds are about 15 or 16 percent protein and are formulated to sustain good growth to maturity.

After about 14 weeks of age, you can substitute the grower feed with developer feeds if they are available. These feeds are lower in protein than grower feeds (14 to 15 percent) and are formulated to prepare young

---

James C. Hermes, Extension poultry specialist, Oregon State University. This replaces an Oregon State University Extension publication by the same title.



chickens for egg production.

**Note:** These two feed types are virtually interchangeable; either one can be fed to chickens between 6 weeks of age and the beginning of egg production.

## Layer and breeder feeds

Once your chickens begin laying eggs, you can choose between layer and breeder feeds. Your choice of feed at this stage depends on how the eggs will be used.

*Layer feeds* are formulated for chickens that are laying table eggs (those used for food). Layer feeds contain about 16 percent protein and extra calcium so the chickens will lay eggs with strong shells. Start feeding layer feeds at about 20 weeks of age or when the first egg is laid, whichever occurs first.

*Breeder feeds* are formulated for chickens that are producing eggs for hatching. These feeds basically are layer feeds containing slightly more protein and fortified with extra vitamins for proper chick development and hatching. However, use of breeder feeds is somewhat questionable for the small flock producer, since the increased cost may not be justified by the potentially slight increase in hatchability.

You also may give both laying and breeding chickens access to ground oyster shell. Some high-producing laying birds may require the extra

calcium provided by oyster shell, even though the prepared diet is a complete feed. The need to feed oyster shell can be determined by shell quality. If eggs are laid with thin shells that are easily cracked or shells that are rough with almost a sandpaper feel, oyster shell may help to increase shell strength and quality. When feeding oyster shell, provide a separate feeder allowing free choice feeding on oyster shell.

## Medicated feeds

Most commercial starter diets are medicated to prevent common yet serious diseases in chicken flocks. Medications are less common in grower or layer diets. Feeds that contain medications are labeled as such.

Check the label for warnings concerning the medication used in feeds. Withdrawal dates will be indicated on the label if there is a risk of the medication's presence in the eggs. Feed medications are highly researched and regulated, so you can be confident that the eggs are safe to eat if you follow the label instructions.

If you wish to use nonmedicated feeds, they usually are available or can be ordered. However, in some cases, mortality levels, especially in young chicks, may rise to unacceptable levels if nonmedicated feeds are fed.

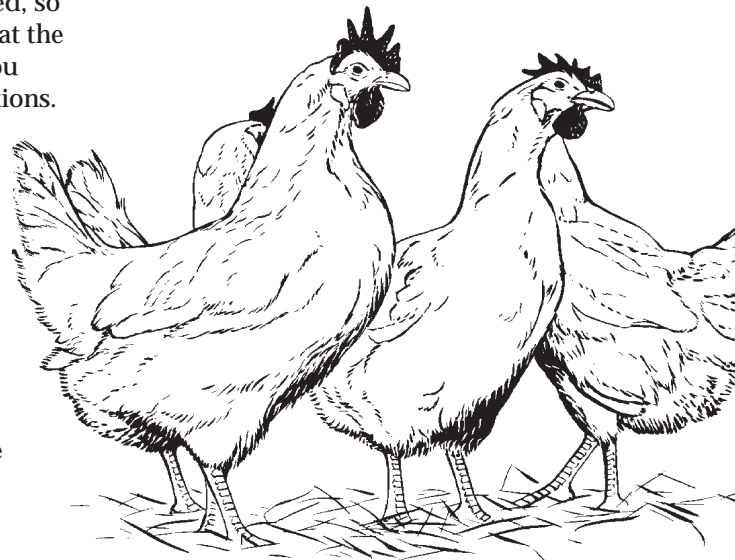
## Water

Water is the single most important nutrient that chickens consume. Therefore, it is necessary to provide adequate amounts of clean, fresh water daily during growth and egg production. Chickens will drink between two and three times as much water by weight as they eat in feed. Their consumption of water increases in warm weather.

## Scratch (grains)

Chickens love to scratch. They use their feet to disturb the litter or ground to find various seeds, greens, grit, or insects to eat. Feeding scratch grains can promote this behavior, which gives the birds exercise and keeps them busy. However, feeding scratch to chickens is not necessary when they are receiving a complete diet.

Scratch feeds usually are cracked, rolled, or whole grains



## How to feed your laying and breeding hens

such as corn, barley, oats, or wheat, which are relatively low in protein and high in energy or fiber depending on which grains are used. When fed in concert with prepared feeds, they dilute nutrient levels in the carefully formulated diets. Therefore, you should provide scratch sparingly. A general rule of thumb is to feed only as much scratch as the chickens can consume in about 20 minutes, or about 10 to 15 percent of their total daily food consumption.

When feeding scratch, also provide an insoluble grit so the birds can grind and digest the grains properly. If the birds have access to the ground they usually can find enough grit in the form of small rocks or pebbles. Otherwise, you can purchase grit. Oyster shell cannot be substituted for grit because it is too soft to aid in grinding.

### Table scraps and greens

Chickens, like other family pets, enjoy many of the same foods their owners do. However, excessive feeding of table scraps and greens may not be beneficial to the birds or to their productivity. Some supplementation is fine—in fact, greens help to keep egg yolks deep yellow in color—but, as with scratch, these foods should be limited. The same rule applies here: the total supplementation of scratch and table scraps should be no more than can be cleaned up in about 20 minutes.

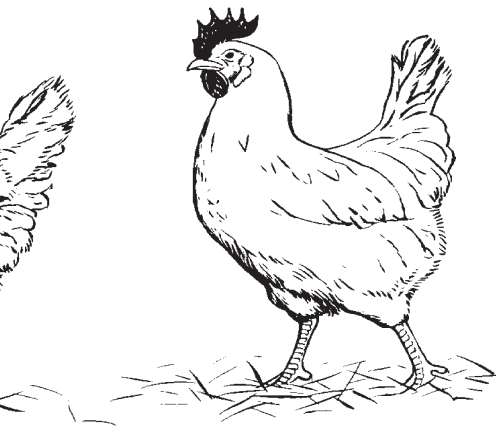
### Feeding management

The mechanics of feeding are nearly as important as the feed itself. Supply enough feeder space so that all the birds can eat at the same time. When space is limited, some birds don't get enough to eat. Keep feed

available for the birds constantly (*ad libitum*). Meal feeding (giving a limited amount of feed several times each day) can reduce productivity if not managed carefully.

Place feeders and waterers so the trough is at the level of the birds' backs. This practice reduces feed spillage, which encourages rodents, wastes feed, and costs money. If bantams and large fowl are feeding and drinking from the same equipment, adjust it to the bantams.

Store feed for a maximum of 2 months, and keep it in a cool, dry place. Some molds that grow in damp feeds are dangerous for chickens, and old feeds can lose some of their nutritional value.





---

Pacific Northwest Extension publications contain material written and produced for public distribution. You may reprint written material, provided you do not use it to endorse a commercial product. Please reference by title and credit Pacific Northwest Extension publications.

---

Pacific Northwest Extension publications are jointly produced by the three Pacific Northwest states—Oregon, Washington, and Idaho. Similar crops, climate, and topography create a natural geographic unit that crosses state lines. Since 1949 the PNW program has published more than 450 titles. Joint writing, editing, and production have prevented duplication of effort, broadened the availability of faculty specialists, and substantially reduced the costs for participating states.

---

Published and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914, by the Oregon State University Extension Service, Lyla Houghlum, interim director; Washington State University Cooperative Extension, James J. Zuiches, director; the University of Idaho Cooperative Extension System, LeRoy D. Luft, director; and the U.S. Department of Agriculture cooperating.

---

The three participating Extension Services offer educational programs, activities, and materials—without regard to race, color, religion, sex, sexual orientation, national origin, age, marital status, disability, and disabled veteran or Vietnam-era veteran status—as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. The Oregon State University Extension Service, Washington State University Cooperative Extension, and the University of Idaho Cooperative Extension System are Equal Opportunity Employers. Published January 1995; Reprinted October 1995.

---

50¢/50¢/50¢