



**Quick Facts**

- Proper feeding of chickens is important.
- Several types of feeding systems are available: free-choice or controlled feeding of mash and grain, or feeding all mash or other complete feed.
- The choice of a feeding system is an individual one.
- Success with any system depends on the feed supply, the equipment, management and individual practices.
- The likelihood of disease and/or nutritional problems will be minimized if good sanitation, adequate housing, equipment and daily care are emphasized.

Regardless of the quality of chicks purchased, good results cannot be expected unless chicks are fed properly.

When using a commercial feed, the manufacturer's feeding recommendations should be followed explicitly. Avoid mixing recommendations of several different companies because each manufacturer designs their product for a specific feeding program.

There are several systems of feeding: 1) free-choice or "cafeteria style" feeding of mash and grain; 2) controlled feeding of mash and grain; 3) feeding all mash, or other form of a complete feed.

Feed form—either mash, crumbles or pellets—are other considerations and each has its specific advantage and disadvantage and varies for optimum utility among the various ages and species of poultry. In short there is no best answer to a correct choice; however, mash is generally the most economical feed store purchase.

No one feeding system is the best—the choice is an individual one. Generally, commercial producers follow system number 3 above, while families with backyard poultry enterprises and hobby poultry producers generally follow either system number 1 or 2.

The free-choice system can work fairly well with small flocks, but leaves too much "guesswork" for a commercial flock. One of the major problems with free choice is maintenance of adjustments influencing feed level, which in turn may permit too much feed wastage. Success with any one system depends on the feed supply, the equipment and management program, and, in addition, the attentiveness of the manager or individual husbandry practices. There are, however, general recommendations for feeding replacement chicks, layers, broilers and turkeys.

A complete ration purchased from a local feed supplier will be the most easily managed, and the likelihood or risk of disease and/or nutritional problems will be minimized if good sanitation, adequate housing, equipment and daily care are emphasized. The actual feed requirement for any group or flock will vary depending upon many factors; however, the figures listed below can be followed as the best estimate of feed utilization.

**Table 1: Feed utilization for poultry.**

	Age	Type feed	Percent protein	Pounds/100 birds* (kilograms)
<b>CHICKENS</b>				
Broiler-	0-4 wks	Starter	22-24	200 (90.7 kg)
	4-8 wks	Finisher	20-22	600 (272.2 kg)
Roasters	0-4 wks	Starter	22	200 (90.7 kg)
	4-12 wks	Grower	17	1200 (544.3 kg)
	12-16 wks	Finisher	14	1000 (453.6 kg)
Replacement Pullets	0-8 wks	Starter	20	400 (181.4 kg)
	8-12 wks	Grower	18	400 (181.4 kg)
	12-21 wks	Developer	14-16**	1000 (453.6 kg)
Layers	21+ wks	Layer	17	25/day (11.3 kg)
<b>TURKEYS</b>				
Small	0-7 wks	Starter	28	600 (272.2 kg)
	7-18 wks	Grower	20	3000 (1360.8 kg)
Large	0-8 wks	Starter	28	1000 (453.6 kg)
	8-16 wks	Grower	20	3000 (1360.8 kg)
	16-24 wks	Finisher	14	2800 (1270.1 kg)

\*Total pounds (kilograms) of feed consumed by 100 birds for the period indicated, except for layers (as noted).

\*\*Detailed study must be given to each individual poultry rearing situation and facility as time of year, indicating the trend in day length and availability of systems for artificial light control need to be considered as they all have an influence on optimum development of replacement of birds.

**Table 2: Approximate feed requirements for maintenance and egg production.\***

Type of bird	Body weight (pounds)	Maintenance	200 Eggs/Year		250 Eggs/Year	
		Total pounds	Total Pounds/pounds	dozen	Total Pounds/pounds	dozen
Dwarf	3.0	45.7	63.4	3.80	67.9	3.26
	3.5	51.1	68.9	4.13	73.3	3.51
Commercial leghorns	4.0	56.3	74.1	4.44	78.5	3.76
	4.5	61.4	79.2	4.74	83.6	4.01
Dual purpose	5.0	66.3	84.1	5.04	88.3	4.25
	5.5	71.1	88.8	5.31	93.3	4.48
Heaviest	6.0	75.7	93.5	5.60	97.9	4.70
	6.5	80.3	98.1	5.87	102.5	4.94

\*Values are guides for smaller non-commercial flock situations (modified by author from Merck 1967).

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**Table 3: Approximate growth rate and feed consumption of broiler chickens.\***

Age (weeks)	Average weight per bird (pounds)	Pounds of feed per 1,000 birds		
		Per day	Per week	Total pounds (accumulative)
1	0.20	35	245	245
2	0.45	60	420	665
3	0.75	75	525	1,190
4	1.10	95	665	1,855
5	1.55	135	945	2,800
6	2.10	175	1,225	4,025
7	2.65	190	1,330	5,360
8	3.20	210	1,470	6,830
9	3.75	220	1,540	8,370
10	4.30	240	1,680	10,050

\*Values are guides for smaller non-commercial flock situations (Adopted by author from Merck 1967). To convert to metrics use the following equivalent—1 pound = 453.6 grams.

**Table 4: Daily water requirements.\***

Chickens (per 100 birds)		Turkeys (per 1000 birds)	
Age (weeks)	Gallons	Age (weeks)	Gallons
1	4.5	1	12.0
2	11.0	2	19.0
3	15.0	3	25.0
4	20.0	4	37.0
5	24.0	5	48.0
6	27.0	6	60.0
7	32.0	7	72.0
8	41.0	8	84.0
9	42.0	9	88.0
10	49.0	10	102.0
11	52.0	11	115.0
12	55.0	12	122.0
Nonlaying hens	50.0	13	142.0
Laying hens (moderate temp.)	50.0-75.0	15-19	167.0
Laying hens (90° F.)	90.0	21-24	135.0-170.0

These values are approximate and vary according to weather. \*Adopted from Merck (1967). To convert to metrics use the following equivalent—1 gallon = 3.78 liters.

**Table 5: Turkey performance. (Feed required and time required to obtain certain average live weights in large white and broad-breasted bronze turkeys.)**

Average live weight (pounds)	Average live weight (kilograms)	Quantity of feed required per bird				Weeks of age to obtain certain live weights	
		Per female (pounds)	Per female (kilograms)	Per male (pounds)	Per male (kilograms)	Female	Male
.6	0.25	.66	0.3	.7	0.3	2.0	1.8
1.1	0.5	1.65	0.75	1.7	0.75	3.5	3.3
2.2	1.0	3.85	1.75	3.5	1.6	5.6	5.2
3.3	1.5	6.60	3.0	5.7	2.6	7.0	6.9
4.4	2.0	9.35	4.25	8.6	3.9	8.3	7.6
5.5	2.5	12.32	5.6	11.2	5.1	9.7	8.7
6.6	3.0	15.84	7.2	14.0	6.34	11.0	9.6
8.8	4.0	23.32	10.6	20.0	9.1	13.5	11.2
11.0	5.0	33.00	15.0	27.2	12.34	16.3	13.1
13.2	6.0	45.00	20.45	34.8	15.8	19.2	14.9
15.0	6.8	50.00	22.73	38.6	17.5	20.0	16.0
15.4	7.0	58.63	26.65	42.4	19.3	23.1	16.8
17.6	8.0	—	—	50.9	23.2	—	18.6
19.8	9.0	—	—	59.8	27.2	—	20.5
22.0	10.0	—	—	69.9	31.8	—	22.3
24.2	11.0	—	—	76.9	35.0	—	24.0