

Housing One (1) bird needs 1 square foot. If 20 birds, the area needed is 20 square feet. The dimension of the coop is 4 feet x 5 feet.

There are many reasons why poultry should have a well-constructed house: to protect them from: floods, rain and the sun, predators - dogs, cats, snakes, birds of prey, rats and thieves. To prevent mice, rats and other birds from eating their feed and transmitting disease.

What are the basic requirements for a poultry house?

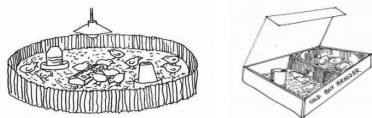
It must: be rain proof; protect the birds from direct sunlight and keep them cool; have good drainage around the house; be easy to clean; have a strong door with a secure lock.



Housing will likely be your biggest investment and to cut costs, local material can be used. Positioning of the house is important to conform with some of the basic requirements (mentioned above). High ground will stop flooding in rain storms. **Floor** The floor must be: flat and smooth and easy to clean; have a good depth of litter cover (sawdust, shavings, dried grass, leaves, chopped straw.) **Litter** should be raked weekly; should be changed every two batches of meat birds; makes excellent fertilizer for your garden; makes an excellent compost when mixed with leaves, grass, vegetable waste, etc. Fresh poultry manure must be stored for a few months, otherwise it might burn plants. Adequate floor space for birds is most important particularly in Cayman where it is almost always hot. If they are too crowded broilers will not grow well. Remove manure from empty house and replace with clean litter.

Equipment Drinkers You can make your own drinkers or buy them. They must be adjusted to the correct height so that birds can drink easily. **Feeders** Poultry must have continual access to feed in properly-adjusted feeders, otherwise they will not grow well. These can also be made from local material, or purchased. Feeders must always have a lid to stop birds from entering the feeder. An inexpensive spring balance for weighing birds, feed, and other things, you will find to be very useful.

Brooding: This is a term which means keeping chicks warm and comfortable. When your baby chicks arrive they will need special care. This is the time when you can expect a few chicks to die. In tropical countries it may not be necessary to provide extra heat during the day but only at night and then only for the first 10 days. Chicks should be given water immediately after arrival on the farm and some may need to be shown how to drink. A cold-box brooder can be used but only for up to 50 chicks. It needs no heat source. The chicks keep each other warm in an insulated box.



Record Keeping

It is essential that you keep good records of feed used, dead birds, weight of birds at the end. These records will then be used to determine if you made a profit or a loss. Ones primary goal is to get maximum body weight at the lowest possible cost. Performance and productivity of broilers, control of disease, feed formulation, etc; are all important in record keeping.

Broiler record sheet

(PHOTOCOPY THIS PAGE FOR RECORD KEEPING.)

Batch No.: Shed No.: Breed:
Hatch date: Starting No.:

Feed given (bags)								
Day	1	2	3	4	5	6	7	Total
Week 1								
Week 2								
Week 3								
Week 4								
Week 5								
Week 6								
Week 7								
Week 8								
Total								

Live body weight at 42 days: FCR: %
No. of birds weighed: Mortality: %
Total weight of birds: kg Total feed intake: kg/bird
Average weight of one bird: kg

Remarks:

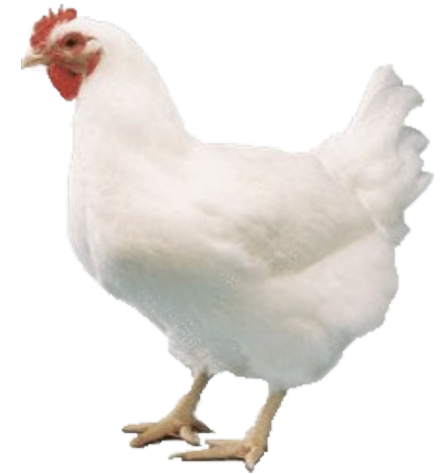
Some Interesting Facts

- Chickens have more bones in their necks than giraffes.
- They have no teeth and swallow their food whole. Part of their stomach is used to grind their food up.
- There are more chickens than people in the world.
- Chickens make sounds with actual meaning. They give different alarm calls when threatened by different predators.
- Chickens raised for meat do not lay eggs (unless kept for a long time).
- Young roosters are called Cockerel; older than a year they are Cocks.
- Chickens are very social animals. They will fight to protect their family and will mourn when a loved one is lost.



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Raising Broiler Chickens



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General Information

The **chicken** (*Gallus gallus domesticus*) is a domesticated fowl. As one of the most common and widespread domestic animals, and with a population of more than 24 billion in 2003, there are more chickens in the world than any other bird. Chicken meat is very popular throughout the world. It is seen as a healthy meat low in fat and rich in protein (lean meat).

Nutrition & Feeding



The most popular barnyard birds can be highly efficient meat producers. A broiler, proves its weight-gaining efficiency by yielding nearly a pound of meat for every two pounds of feed. The care of chickens centers around two foundational pillars: Housing and

Feeding. Chickens are omnivores. Chickens must be fed the right types and amounts of feed to ensure their proper health and happiness. In the wild, they often scratch at the soil to search for seeds, insects and even larger animals such as lizards or young mice. Ideally, chicks should be given a bought formulated diet. A commercial starter diet should be purchased and fed for at least the first 10 days because they need to get off to a good start. They will have eaten only about 250 g of feed during this time. A grower diet will then be introduced by mixing what remains of the starter diet with the same amount of the grower diet. This will mean that they can adjust easily to the new feed. When the mixture is finished, chicks will be on the grower feed only. Check chicks several times a day to see that they are comfortable and have feed and water. It will be helpful if you have weighing scales so that you can weigh feed given to the chickens and get the live weight of a sample of 10 birds every 2 weeks, caught with a simple leg catcher. This will tell you how well your chickens are performing. Do your birds reach targets at 3 weeks and 6-7 weeks? What should be your marketing age range for best growth and feed consumption? Weight gain is weight of bird divided by age in days then divided by the total number of birds to obtain the average weight gain of one bird.



Feed efficiency is feed consumed (kg) during a fixed number of days divided by the total weight of all birds (kg) consuming that amount of feed. As a guide, the average weight of your chickens at 6 weeks should be 1.6 kg and at 7 weeks 1.75 kg.

Feed efficiency should be under 2.5 kg feed for 1 kg of weight gain at 7 weeks of age. Many people overlook the importance of providing clean, fresh water to their flocks. Water, though not often considered a nutrient, is the most important nutrient for animals. Chickens, as all farm animals, need clean water at all times. Drinking water must not get too hot or cold, or chickens will not drink it. Clean the water troughs and replace with fresh water at least once daily. Keep water and feed troughs clean of droppings, litter, soil, and other contaminants.



Chicken Feed Protein Requirements		
Age or Type of Chicken	Protein	Calcium
Broilers (to 6 wks)	23%	0.9%
Broilers (to market)	10%	0.8%

Health, Disease & Parasites

Chickens may live for five to eleven years, depending on the breed. In commercial intensive farming, a meat chicken generally lives only six weeks before slaughter. A free range or organic meat chicken will usually be slaughtered at about 14 weeks.



Fowl Pox is a worldwide disease of poultry caused by viruses. There are two forms of the disease. The first is spread by biting insects (especially mosquitoes) and wound contamination and causes lesions on the comb, wattles and beak. Birds affected by this form usually recover within a few weeks. The second form is spread by inhalation of the virus and causes a diphtheritic membrane to form in the mouth, pharynx,

larynx and sometimes the trachea. The prognosis for this form is poor. There is no treatment, however vaccines are available for the unaffected flocks or individuals. If there is evidence of secondary bacterial infection broad-spectrum antibiotics may be of some benefit.



Heat Stress not only causes suffering and death in the birds, but results in reduced or lost production and hence adversely affects the profit from the enterprise. The Thermal Comfort Zone for most animals is between 4° C and 25° C. When temperature exceeds 25° C animals

suffer heat stress. In severe cases of heat stress the deep body temperature rises, animal cells are affected and production performance is reduced. Animals typically react to Heat Stress conditions by eating less food, thus naturally controlling the rise in deep body temperature caused by digestion. Respiratory rate rises and there is a marked increase in insensible heat loss by evaporation of water from the lungs.

They also drink at least 5 times the amount of water they would under temperate conditions, urine output increases and many mineral ions are lost. The body needs a continuous supply of fluids and electrolytes, Without the key electrolytes it is impossible to balance the internal environment. When an animal is under stress, particularly Heat Stress, acid concentration increases, the body's balance is upset and economic loss will follow. Before that situation is reached, a control and treatment strategy must be put in place. Ensure plentiful supply of cool, clean drinking water. Medicate water continuously with electrolytes to restore lost ions and to help preserve electrolyte balance. Feed earlier in the morning and later in the evening.

Internal Parasites live inside the chicken and rob them of food or blood. They include worms, coccidia and blood parasites. Chickens that have worms may look unhealthy and thin. They may gain weight slowly even though they eat more feed than chickens without worms, and they may lay fewer eggs. Note that many species of worms can live in chickens and not cause any problems. If you notice worms or your chickens don't seem to be as healthy as they could be, it may be time to check for worms and treat if necessary. Make a habit of checking out chicken droppings because some worms are visible in droppings. Even if the worms aren't visible, a staff member for the Department's Veterinary Services Unit can examine the droppings in the lab. Generally, treatment for chicken worms consist of deworming the entire flock. If you deworm meat chicks, you need to follow label directions about how long to keep the birds before they can be butchered for eating; you don't want pesticide residues to remain in the meat. **Nematodes** are the most common and most important helminth species in poultry. More than 50 species have been described in poultry, and the majority of these can cause pathological damage to the host. The majority of nematode species live in the intestines but a few species may occur in other parts of the body. **Cestodes** (tapeworms) are also found in poultry, and those reared under free range, scavenging or backyard conditions are more likely to be infected with them. The tapeworm require an intermediate host, such as earthworms or insects. Chickens become infected after ingestion of an infected intermediate host. **Coccidia** are most often a problem in young, growing birds. Symptoms include bloody diarrhea, anemia, pale skin color, listlessness, poor appetite, or dehydration. Young birds with heavy infestations often die. Treatment include feeding baby chicks a starter feed medicated with coccidiostats (which kill Coccidia) and you can also put certain medications into the chickens' drinking water.