

# [Introduction nowadays quail gaining importance as diversified poultry](https://assignbuster.com/introduction-nowadays-quail-gaining-importance-as-diversified-poultry/)

IntroductionJapanese quails belong to the  Phasiandiae family , and they are intensively rearedfor commercial meat and egg production. Quails  main characteristic like of fast growth, earlysexual maturity and high rate of egg production is important . Quail have theability to produce 4 generation in a year.

Nowadays quail gaining importance asdiversified poultry species to augment meat and egg production. Also it isvaluable as a animal model to carry out laboratory research because of its lowbody size, short life cycle etc. Comparative performance of different egg and meattype quails: Attributes CARI pearl (white egg shell) CARI Uttam (Broiler) CARI Ujjwal (White breasted) CARI Sweta (White feathered) CARI Brown Live wt. 5th week 140 240 175 155-165 180-185 Daily feed consumption(g) 20-25 25-28 25-28 25 25 FCR, 5th week 3. 20 2. 51 2. 80 2. 70   Sexual maturity (days) 45 42-45 49 46 38-41 50% egg production 8 week – – –   80% egg production 10 week – – –   Hen day- production % 78-81 – – –   Hatchability % on eggs set 70-80 70-75 65 50-60 60-65  Feeding  Management: Feed material should be made of small particles.

quailconsume about 500gms of feed in 5 weeks. Quails consume 30-35gm of feed perday. it takes about 400gms feed for production of 12 eggs. By adding 5kg of oilcakes to 75 feed we can use Broiler starter mash.   Nutrition is  the most important factors required tomaintain quails in good physical condition and to obtain normal growth and egg production. A “ complete” or well-balanced feed containing all the protein , energy , vitamins , minerals, and other nutrient should be prepared . Nutrient levels ofthe diet must  meet the dietary needs ofthe birds being produced. Quail grown for meat are provided starter and finisherdiets, whereas laying or breeder birds are fed starter and breeder diets.

Threetypes of diet are recommended during commercial rearing: starter (up to 2 weeksof age), grower (from 3 to 5 weeks) and layer mash (> 6 weeks of age). Generally local farmers may use the chicken starterand layer diets for their growing and laying quails and supplement them withhigh protein ingredients such as fish meal, soyabean meal and skimmed milk. Fast early growth is achieved with high protein diets. These high proteinstarter feeds will give quick development to growing birds as well as bringingearlier and more consistent laying to hens. The dietary requirement for birds nearing maturityare similar to starter ration except that calcium and phosphorus levels must beincreased.

In hot weather , calcium level should be increased asquail eat lessfood but still require calcium to maintain egg production. Shell grit or groundlimestone can be added to the diets after 5 weeks of age. Growing birds are fed a ration containingcoccidiostat from hatch until the last week before slaughter.

The feeding ofunmediated diets before slaughter is recommended when using any dietary drug, regardless of whether the restriction is required or not. FDA approved twococcidiostats( Monensin sodium &Amprolium) in quail feed . WaterWater is most important nutrient for animals. Quailneed clean water at all times. Water must not be too hot or cold . clean thewater troughs at least once daily. Keep water and feed troughs clean of droppings, litter, soil and other contaminants. Feedsand FeedingThree types of  Japanese quail feeds are available : Chick feed (0-2 week), grower/finisher feed (3-4week) and layer/breeder feed ( above 6 weeks).

Broiler quail consume 550-600gmup to marketing and adult layer/ breeder quail consume 35-40 gm/day. Feedshould be given ad libitum and the feeder should not be filled more than 2/3rdof its capacity to prevent wastage. The optimum energy level of quails is 2800-2900kcal/kg feed during the growth period (0-5 week) and 2700 to 2900 kcal/kgduring laying phase (5-30 weeks of age). Protein and amino acid requirement arehigher than that of broiler chickens(Mandal et.

al 2004d). Methionine andthreonine are the major limiting amino acids in maize-soyabean-meal based dietsfor growing quail chickens. Broiler quail chickens. Broiler quail chicks givepositive response in terms of grain and feed conversion to a diet with higherprotein and amino acid levels (120% of NRC, 1994) during  0-3 weeks of age. The growth rate is reducedduring 3-5 week of age and 90% levels of amino acids is sufficient to obtainbetter growth and feed conversion.

Therefore, a biphasic rearing system (0-3and 3-5 weeks) has been suggested (kaur et al, 2006, 2007, 2008) for growingquails. Egg mass output as proportion of body weight is more than that ofchicken, thus , requirement of energy, protein and amino acids in layer/breederration are higher . Egg weight of quail is about 10 g. A 10 g egg contains 7. 46gwater, 1. 31g protein, 1. 12g fat and 0. 11g of total ash.

The average daily feedintake is about 25 g. The minimum daily protein requirement is less than 4. 7gand energy is 60 kcal ME per layer.

Broiler quails lay eggs  almost at a similar rate as egg type quailsand the egg size is higher (11-13g) . The daily feed intake is  about 30g and minimum protein requirement isabout 5g (with energy 65kcal) in broiler line breeders. Daily water intake is1.

7 to 2. 3 times of feed intake. All mash diet is preferred. For egg lines, adiet with 21. 5% protein and 2700-2900 ME kcal/kg during laying period issufficient .

Meat type lines require slightly more protein. Management of quail farm: At 6 weeks of age female weigh about 175-200g andthe males weigh about 125-150g. laying period of quail start at 7 week of ageupto 22 week of age. Quail lay eggs during evening time. quail egg weight isabout 10g. The breast of male quail is narrow and covered with brown and whitefeathers. but female have broad breast and covered with black dots. feamle andmale should be separated at the age of 4 wks. 16hrs of light is required forlaying quails. Nutrientspecification for quail feed (BIS2007)   Quail broiler diet Quail Layer Diet