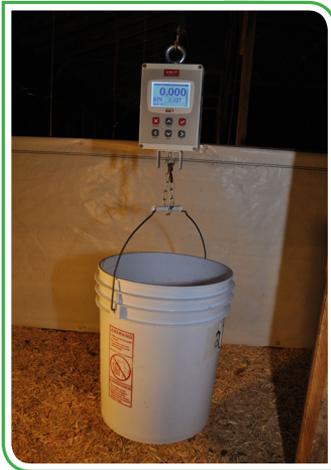


Why bulk weigh broilers between 0 and 21 days?

Routine accurate estimates of average body weight allows:

- Accurate monitoring of live flock performance.
- Identification of possible performance issues.
- Defined end product specifications to be as closely met as possible.



The procedure for bulk weighing broilers between 0 and 21 days

Bird Handling

Birds must be handled in a calm and correct way by people who have been appropriately trained. Bird welfare must be a priority at all times.

Equipment

1. A good set of electronic or manual / mechanical dial scales with 10 g (0.02 lb) increments, an accuracy of +/- 20 g (0.04 lb) and a minimum capacity of 10 kg (22 lb).

Examples of different types of weighing scales (left to right) - Floor pan scales for single or multiple box weights and manual dial scales.



2. A pen or pencil.
3. Weight recording charts.
4. Scientific calculator if weighing using manual / mechanical dial scales.

Note - All scales should be calibrated on a regular basis (at the beginning and end of every weighing) to ensure they are weighing accurately and correct body-weight management is maintained.

Procedure – Day 0 (Placement)

Weigh at least 3 boxes of chicks per house placed.

- Step 1** Zero scales with an empty chick box and lid.
- Step 2** Weigh a box with chicks inside and with lid on to gain total weight of chicks and box – record weight.
- Step 3** Count out the number of chicks weighed in each box – record chick number.
- Step 4** Calculate average chick weight.
- Step 5** Plot average weight of all chicks weighed on a weight chart and compare to target.



Example Calculation:

$$\text{Average chick weight (g / lb)} = \frac{\text{Total weight of chicks weighed in box}}{\text{Number of chicks in box}}$$

$$\text{Average chick weight} = \frac{3200 \text{ g (7.05 lb)}}{80} = 40 \text{ g (0.09 lb)}$$

Procedure – Day 7, 14 and 21

Step 1 Place an empty bulk weighing container, such as a box or bucket (big enough to hold 10 - 20 chicks at a time), on scales and 'zero' the scales with the container in place.

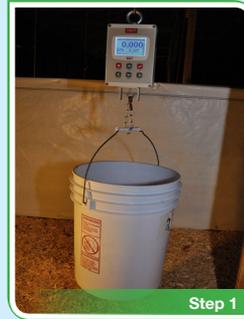
Step 2 Using a catching pen, catch a sample of at least 1% or 100 birds (whichever is greater) per house. If birds are sexed, a minimum of 100 birds (or 1% of the population) of each sex should be weighed. Samples should be taken from 3 evenly distributed locations throughout each house (or sexed pens if growing sexes separately). Sample points should be away from door and walls.

Step 3 Place 10 - 20 birds at a time into the weighing container and record the total weight and the number of chicks. Never put too many chicks in the container; they should not be placed on top of each other.

Step 4 Gently empty the birds out of the container back into the main population and repeat the weighing process until **ALL** birds in the catching pen have been weighed. This will eliminate selective bias.

Step 5 Add together the weight of all samples weighed and divide by the total number of birds weighed.

Step 6 Plot average chick weight on a weight recording chart and compare to target.



Step 1



Step 3



Step 4

Interpreting results

If body weights are inconsistent with expected gains or there is a marked (± 50 g [0.11 lb]) deviation from the standard body-weight profile, re-weigh the flock to check weighing accuracy using the same procedures as above.

A deviation in normal weekly body-weight gain (± 20 g [0.04 lb]) during the first 14 days that cannot be attributed to weighing error, generally indicates a need to revise farm brooding procedures.

If early body-weight targets are not being achieved it is necessary to:

- Measure, monitor, and react to house brooding conditions:
 - o Check houses are pre-warmed for 24 hours prior to chick arrival.
 - o Check house air temperature at chick level is 30.0°C (86.0°F) at placement.
 - o Check house relative humidity is 60 - 70% for the first 3 - 5 days.
 - o Check house litter temperature is 28.0 - 30.0°C (82.0 - 86.0°F) at placement.
 - o Check that chicks have no more than 1 m (3.3 ft) to travel to an adequate fresh water supply.
 - o Check that at least 80% of the brooding area floor is covered with paper and / or trays (1 per 100 chicks), and a good quality sieved crumb or mini pellet is fed.
 - o Check light intensity in the brooding area is 80-100 lux (7 - 9 fc).
 - o Check crop fill.
- Feed a higher nutrient quality starter feed.

More Information

- Broiler How To 04; How To... Assess Crop Fill.
- Broiler Management Handbook.