



HOW TO EVALUATE FAT PAD AND FLESHING IN EFFICIENCY PLUS FEMALE BREEDERS?

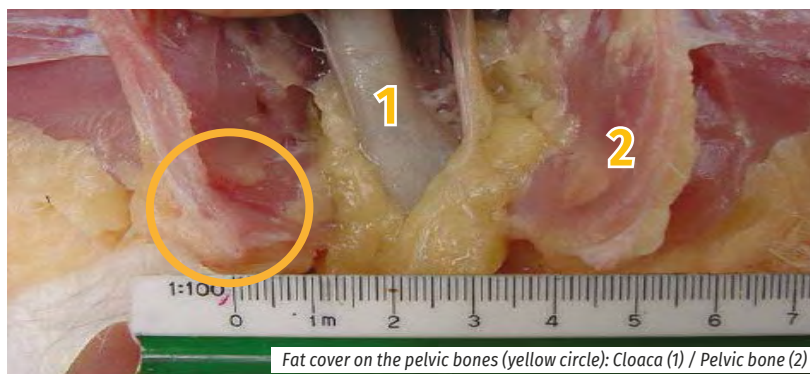
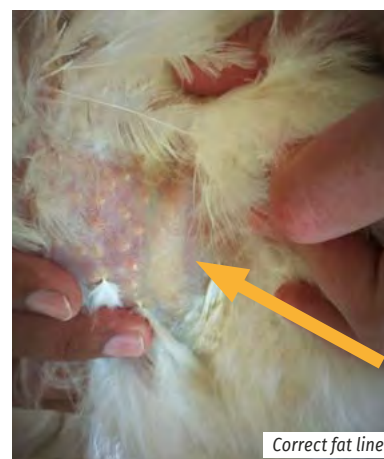
Following selection for feed efficiency, the body composition of broiler breeder females has also changed in recent years. Modern broiler breeders have less fat and a better genetic potential to grow breast muscle. However, a minimum amount of body fat in female breeders at the onset of lay is known to help obtain maximum egg production performance and a good quality of the progeny. Recording the pelvic bone opening score, body fat pad percentage and fleshing score at the end of the rearing period provides useful indicators to:

- Evaluate the dietary programme during the rearing period.
- Define the feeding strategy during the onset of lay.
- Help in the post peak period to allow feed withdrawal without losing persistency of egg production and chick quality.

This bulletin describes a method of three parameters to evaluate fat and fleshing score in Efficiency Plus female breeders before the onset of lay, with an ideal age for assessments between 21 and 23 weeks (147 - 161 days). These techniques are used extensively in various parts of the world.

1. VISUAL FAT EVALUATION (Fat line and fat cover on the pelvic bones)

- In each weight category (e.g. light, medium, heavy), using a catching frame, enclose a sample of at least 50 birds.
- For each individual bird, assess the presence of the fat line and the fat on the pelvic bones (soft and fleshy pelvic bones). For a better view of the fat line, it is important that the working area is well lit. If necessary, carefully remove some feathers to facilitate the evaluation.
- Assess and note the results (see the table on page 2).
- Expected result: at least 90% of the birds with the apparent fat line at 22-23 weeks of age. In case the value is lower than 90%, please contact your Hubbard local technician for advice.



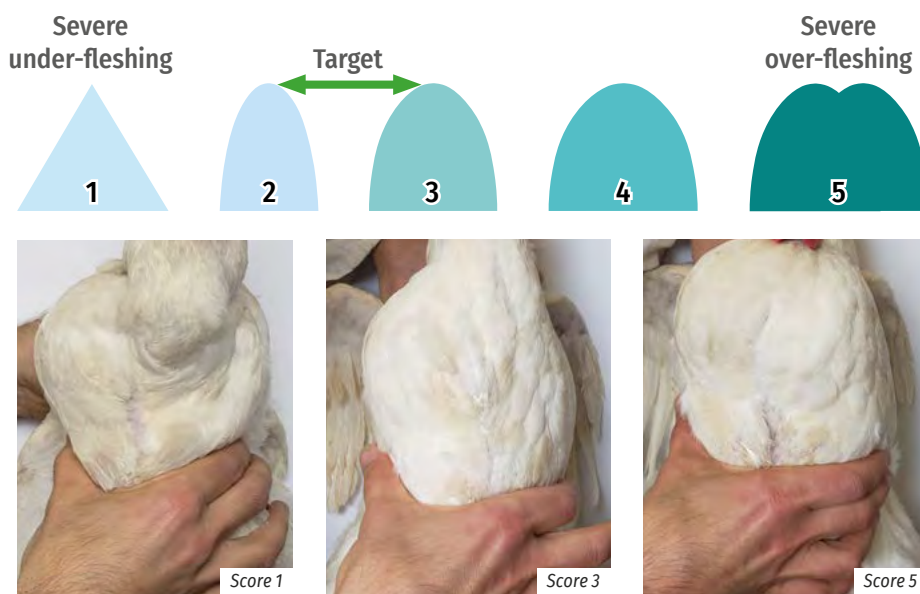


2. FLESHING SCORE EVALUATION

► It is important to train the team that will carry out the assessment well before starting, so that everyone can use the same criteria.

► Palpate and evaluate at least 50 birds per weight category (e.g. light, medium, heavy) using the pictures shown on the right.

► Expected results: minimum 80% of the birds with a score between 2 and 3 and as little as possible score 1 and score 5.



Evaluation of the fleshing

Company:	
Farm:	
House:	
Flock age (days):	

METHOD	INDICATOR	PEN 1	PEN 2	PEN 3	TOTAL
		Category Light	Category Medium	Category Heavy	
FLESHING SCORE	Number of birds recorded				
	Number with Score 1				
	% Score 1				
	Number with Score 2				
	% Score 2				
	Number with Score 3				
	% Score 3				
	Number with Score 4				
	% Score 4				
	Number with Score 5				
	% Score 5				
FAT LINE	Number of birds with an apparent fat line				
	% of birds with an apparent fat line				
FAT COVER ON THE PELVIC BONES	Number of birds with soft and fleshy pelvic bones				
	% of birds with soft and fleshy pelvic bones				

Example of a table to record fleshing score, fat line under the wing and fat cover on the pelvic bones



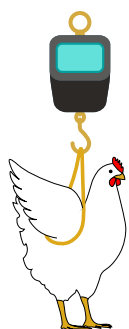
3. FAT AND BREAST EVALUATION (%)

- Select at least 3 representative birds* per weight category (e.g. light, medium, heavy).
- Follow the 5 steps shown below:
 - ⇒ Step 1: Weigh individually and note the bodyweight in grams for each bird in each category.
 - ⇒ Step 2: After culling, remove all fat (abdominal and fat around the gizzard) and weigh it. Record the data.
 - ⇒ Step 3: Remove the crop and weigh it (g). Record the data.
 - ⇒ Step 4: Weigh the breast with bone (g). Record the data.
 - ⇒ Step 5: Calculate the percentages of fat and breast (Table on page 4):

$$\text{Bodyweight (g)} - \text{Crop weight (g)} = \text{Bodyweight without feed (g)}$$

$$\% \text{ Fat pad} = \frac{\text{Fat weight (g)} \times 100}{\text{Bodyweight without feed (g)}}$$

$$\% \text{ Breast} = \frac{\text{Breast weight with bone (g)} \times 100}{\text{Bodyweight without feed (g)}}$$



Step 1



Step 2



Step 2



Step 3



Step 4

* Note: Culling must be undertaken according to local regulations or under veterinary supervision as appropriate. Caution: the number of birds sampled here is to provide a guideline. It is likely that far more birds may be needed to give statistically significant results than can be justified commercially.

Please contact your Hubbard Technical Responsible for more information.



Company Name:	
House number:	
Flock identification:	PS Efficiency Plus
Flock age (days):	155 days old

CATEGORY	BODYWEIGHT (g)	CROP (g)	BODYWEIGHT WITHOUT FEED (g)	FAT PAD (g)	FAT PAD (%)	BREAST WITH BONE (g)	BREAST WITH BONE (%)
LIGHT 1	2525	100	2425	35	1.44	587	24.22
LIGHT 2	2579	104	2475	37	1.48	602	24.34
MEDIUM 1	2740	74	2666	43	1.62	662	24.84
MEDIUM 2	2848	97	2751	47	1.71	685	24.89
HEAVY 1	2901	133	2768	53	1.93	695	25.12
HEAVY 2	2955	160	2795	52	1.87	705	25.21
AVERAGE	2758	111	2647	45	1.68	656	24.77

Example of a table to record fat pad weight and breast meat yield



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