

# Feeding Show Lambs



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# Lamb Quiz

- What will your lamb weigh at the fair?
- How many lbs. per day will your lamb gain?
- How much will a 100 lb. lamb eat? How much does it need to eat?
- Can you estimate weight of the lamb with a tape measure?
- Match the following weights with protein req.
  - 60 lbs.                      13% of diet
  - 80 lbs.                      15% of diet
  - 110 lbs.                     12% of diet

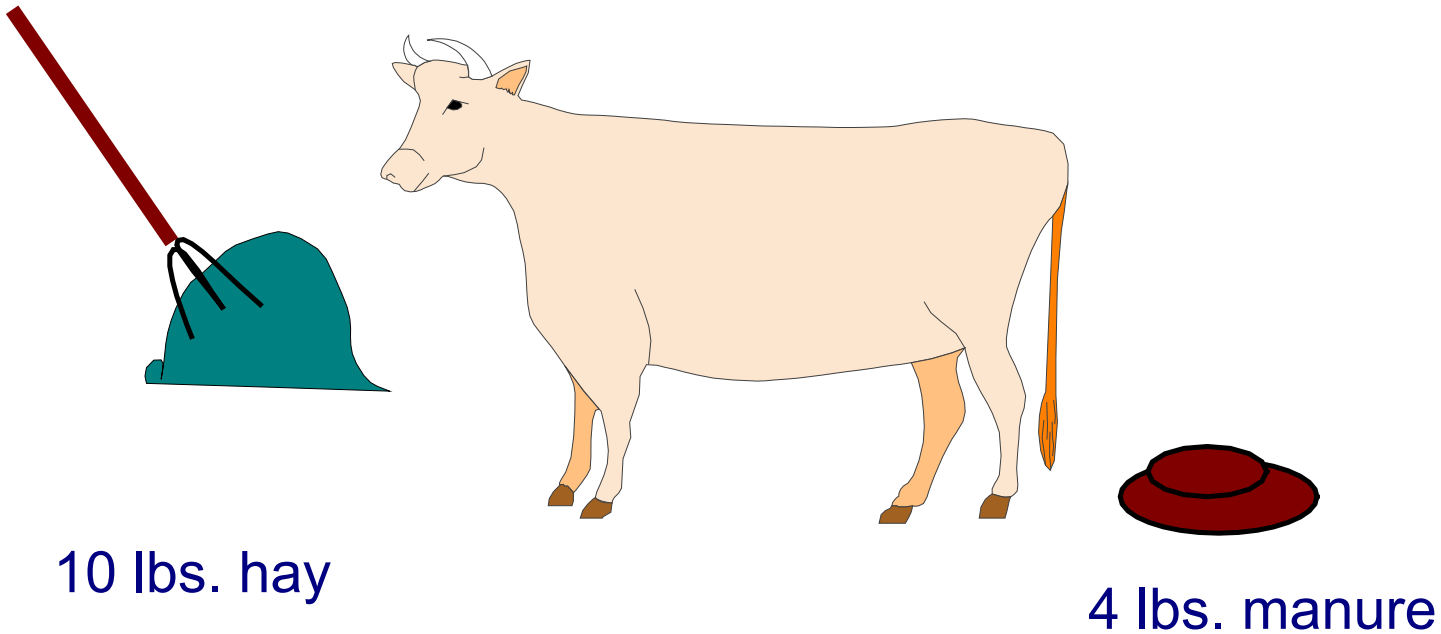
# Normal Feed Intakes

- Growing Lamb (60 to 80 lbs.: 4% of body weight
  - $80 \text{ lbs.} \times .04 = 3.2 \text{ lbs. per day of feed}$
  - 50% grain = ?? lbs. grain/day
- Finishing Lamb: 3% of body weight
  - $110 \text{ lbs.} \times .03 = 3.3 \text{ lbs. feed per day}$
  - $3.3 \text{ lbs.} \times .6 = 1.98 \text{ lbs. grain per day}$

# Rumen Adjustment Period

- Grass hay if not used to alfalfa
  - ❖ 1<sup>st</sup> 3 days, all grass hay, then 25% alfalfa
  - ❖ 5<sup>th</sup> day, 50% alfalfa
  - ❖ 7<sup>th</sup> day, 75% alfalfa
  - ❖ 9<sup>th</sup> day, 100% alfalfa
- Grain Step Ups:
  - ❖ .25 lbs. grain, 3 days
  - ❖ .50 lbs. grain, 3 days
  - ❖ 1.0 lbs. grain, 3 days
  - ❖ 1.5 lbs. grain, 3 days, then hold
  - ❖ If more grain is needed, feed each 10% increase in grain at least 7 days
  - ❖ For 4-H lambs, 40 to 50% grain is the norm, never more than 70%
- Grower Ration (50% grain) fed until 65 to 70 lbs. unless lamb is large and many days until show
- Danger signs:
  - ❖ Off feed
  - ❖ Loose stools

# Total Digestible Nutrients (TDN)



10 lbs. fed - 4 lbs. manure = 6 lbs. digested

$$\frac{6}{10} = 60 \% \text{ TDN}$$

		orchardgrass hay		alfalfa hay, midbloom		corn		barley		oats			
		% CP	% TDN	% CP	% TDN	% CP	% TDN	% CP	% TDN	% CP	% TDN		
		9.7%	57.0%	17.1%	58.0%	10.1%	91.0%	12.9%	84.0%	12.2%	76.0%		

**Feed Mixtures**

Feeding Rations		orchardgrass/corn		orchardgrass/barley		orchardgrass/oats		alfalfa hay/corn		alfalfa hay/barley		alfalfa hay/oats	
%grain	%forage	% CP	% TDN	% CP	% TDN	% CP	% TDN	% CP	% TDN	% CP	% TDN	% CP	% TDN
	100	9.7	57.0	9.7	57.0	9.7	57.0	17.1	58.0	17.1	58.0	17.1	58.0
20	80	9.8	63.8	10.3	62.4	10.2	60.8	15.7	64.6	16.3	63.2	16.1	61.6
30	70	9.8	67.2	10.7	65.1	10.5	62.7	15.0	67.9	15.8	65.8	15.6	63.4
40	60	9.9	70.6	11.0	67.8	10.7	64.6	14.3	71.2	15.4	68.4	15.1	65.2
50	50	9.9	74.0	11.3	70.5	11.0	66.5	13.6	74.5	15.0	71.0	14.7	67.0
60	40	9.9	77.4	11.6	73.2	11.2	68.4	12.9	77.8	14.6	73.6	14.2	68.8
70	30	10.0	80.8	11.9	75.9	11.5	70.3	12.2	81.1	14.2	76.2	13.7	70.6
80	20	10.0	84.2	12.3	78.6	11.7	72.2	11.5	84.4	13.7	78.8	13.2	72.4
85	15	10.0	85.9	12.4	80.0	11.8	73.2	11.2	86.1	13.5	80.1	12.9	73.3

Estimated TDN % in feeds containing 2% fat, 13% protein, and different levels of fiber as shown on feed labels\*

% Fiber listed on feed tag		Different levels of ash + minerals on feed tag					
		2	4	6	8	10	12
2		86.9	85.1	83.3	81.5	79.7	77.9
3		86.1	84.3	82.5	80.7	78.9	77.1
4		85.3	83.5	81.7	79.9	78.1	76.3
5		84.5	82.7	80.9	79.1	77.3	75.5
6		83.7	81.9	80.1	78.3	76.5	74.7
7		82.9	81.1	79.3	77.5	75.7	73.9
8		82.1	80.3	78.5	76.7	74.9	73.1
9		81.3	79.5	77.7	75.9	74.1	72.3
10		80.5	78.7	76.9	75.1	73.3	71.5

\*For 16% protein,deduct .5% TDN. For example a feed tag with 2% ash, 2% fiber, and 16% protein would be 86.1 % TDN.

\*For 10% protein,add .5% TDN. For example a feed tag with 2% ash, 2% fiber, and 10% protein would be 87.4 % TDN.

\*For each 1% added fat, add 2.25% TDN.

## Nutrient Requirements of Lambs (*from NRC, Nutrient Req. of Sheep, 1985*)

Body Weight (lb)	Daily Gain (lb)	DAILY DRY MATTER		COMPOSITION OF FEED			
		Per Animal (lb)	% Live Weight	TDN (%)	Crude Protein (%)	Calcium (%)	Phosphorus (%)
Growing - Lambs finishing - 4 to 7 months old							
66	0.65	2.9	4.4	72.4	14.5	0.50	0.24
88	0.60	3.5	4.0	77.1	11.7	0.42	0.21
110	0.45	3.5	3.2	77.1	10.0	0.35	0.19
Early weaned lambs - Moderate growth potential							
22	0.44	1.1	5.0	81.8	25.5	0.80	0.38
44	0.55	2.2	5.0	81.8	16.8	0.54	0.25
66	0.66	2.9	4.4	75.9	14.5	0.51	0.24
88	0.76	3.3	3.8	78.8	13.3	0.51	0.26
110	0.66	3.3	3.0	78.8	12.1	0.47	0.25
Early weaned lambs - Rapid growth potential							
22	0.55	1.3	5.9	84.6	26.9	0.83	0.37
44	0.66	2.6	5.9	76.9	17.3	0.55	0.25
66	0.72	3.1	4.7	77.4	15.5	0.51	0.24
88	0.88	3.3	3.8	75.8	15.5	0.57	0.29
110	0.94	3.7	3.4	75.7	14.3	0.56	0.29
132	0.77	3.7	2.8	75.7	14.3	0.49	0.27

## Minimal Feed Amounts Required for Show Lambs

	Lbs. of dry matter feed required for zero gain					
Sheep weight, lbs.	50% TDN	60% TDN	65% TDN	70% TDN	75% TDN	
50	0.71	0.59	0.54	0.51	0.47	
60	0.81	0.68	0.62	0.58	0.54	
70	0.91	0.76	0.70	0.65	0.61	
80	1.01	0.84	0.77	0.72	0.67	
90	1.10	0.92	0.85	0.79	0.74	
100	1.19	1.00	0.91	0.85	0.80	
110	1.28	1.07	0.98	0.91	0.85	
120	1.37	1.14	1.05	0.98	0.91	
130	1.45	1.22	1.11	1.04	0.97	

### Additional lbs. of dry matter feed required above maintenance

ADG desired, lbs.	50% TDN	60% TDN	65% TDN	70% TDN	75% TDN	
0.10	1.11	0.62	0.53	0.45	0.40	
0.20	2.21	1.24	1.05	0.89	0.79	
0.25	2.76	1.54	1.31	1.12	0.99	
0.30	3.32	1.85	1.58	1.34	1.19	
0.35	3.87	2.16	1.84	1.56	1.39	
0.40	4.42	2.47	2.10	1.79	1.58	
0.45	4.97	2.78	2.36	2.01	1.78	
0.50	5.53	3.09	2.63	2.23	1.98	
0.55	6.08	3.40	2.89	2.46	2.18	



# Calculations for Preceding Example\*

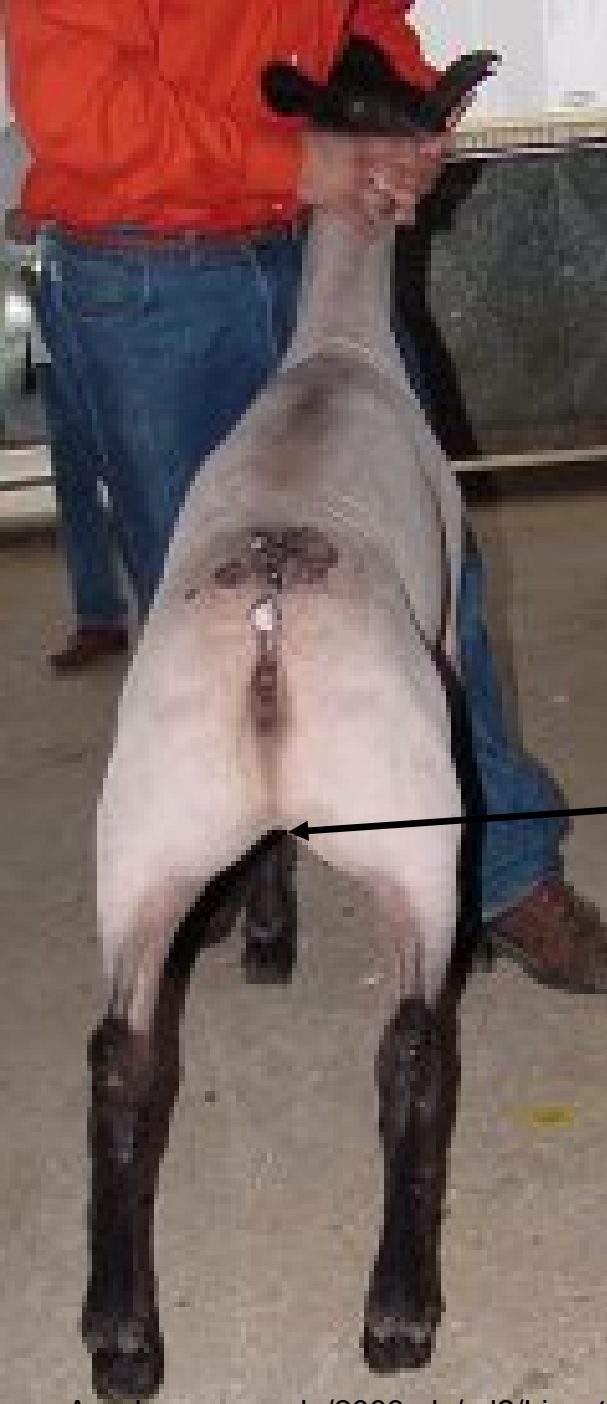
- 125 lb. at sale – 80 lb. purchase wt. = 45 lbs. gain needed
- 45 lbs. gain needed ÷ 110 days before sale = 0.409 ADG
- Feed for maintenance from table for 70% TDN, 110 lb. lamb  
0.91 lbs. feed ÷ .90 dry matter = 1.01 lbs. feed as fed
- Feed for gain from table for 70% TDN, 110 lb. lamb gaining 0.40 lbs./day  
1.79 ÷ .90 dry matter = 1.99 lbs. feed as fed
- Total feed for maintenance + gain  
1.00 + 2.00 lbs = 3.00 lbs./day (not practical to feed in 1/100 of a lb.)

\* *Heavy muscled black face lamb, 125 lb. sale weight*

# Other Precautions

- Sheep are very sensitive to copper levels in the diet. Do not feed trace mineral products designed for cattle to sheep. Keep copper levels in the diet at 8 ppm.









<http://ag.ansc.purdue.edu/sheep/ansc442/Semprojs/carcass/442.htm>



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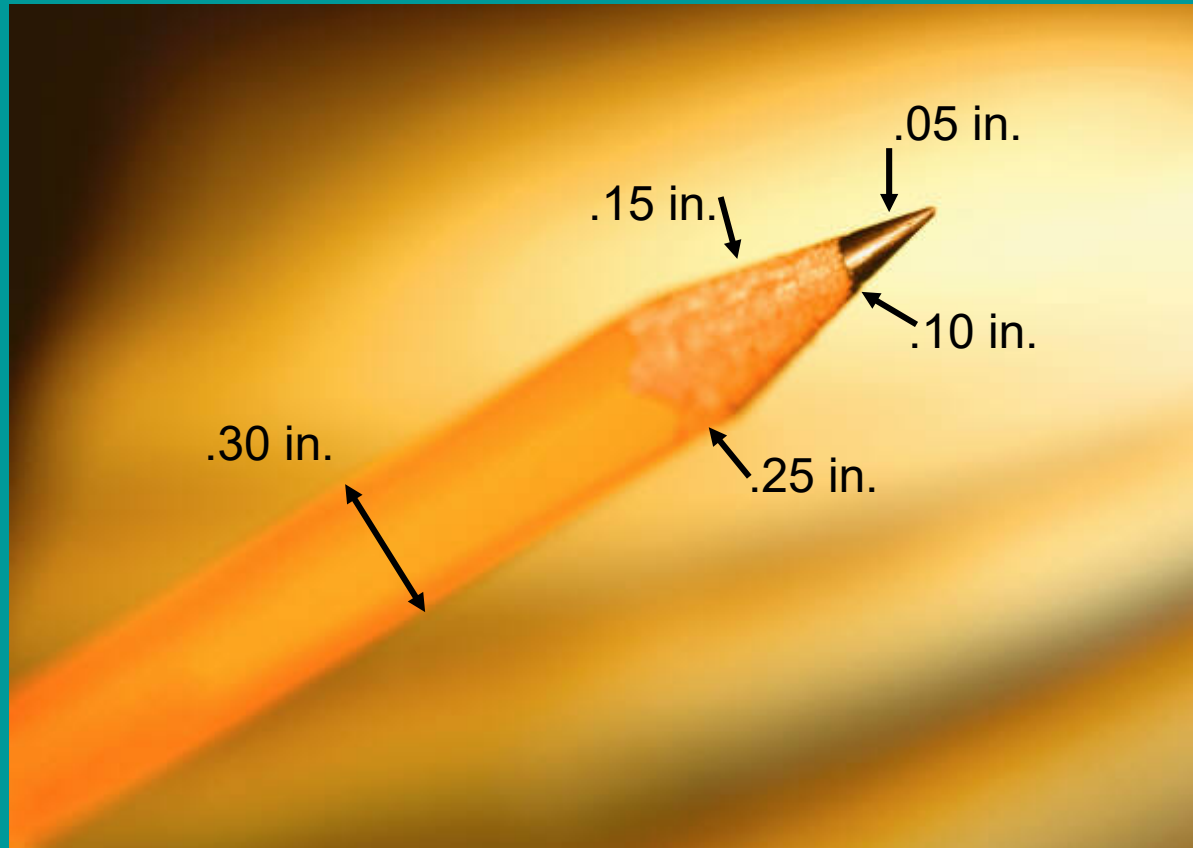
# Lamb Yield Grades

Yield Grade =  $.4 + (10 \times \text{Adj. 12th rib fat thickness})$

<u>Yield Grade</u>	<u>Fat Thickness Range</u>
1	.00 to .15 inches
2	.16 to .25 inches
3	.26 to .35 inches
4	.36 to .45 inches
5	.46 or greater

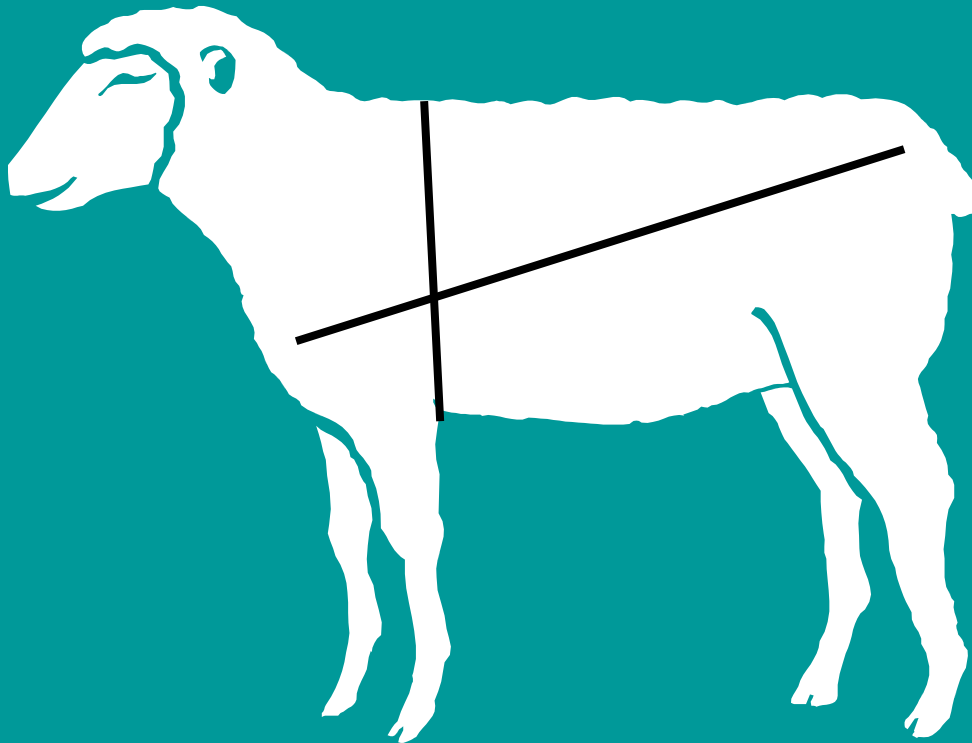


# Estimating Backfat by Feel



# How Much Does the Lamb Weigh?

- Live Wt. =  $(HG \times HG \times \text{Length})/300$
- Length = 31.75 inches
- Heart Girth = 33 inches



# How Much to Feed?

## HOMework

- Lamb weighs 115 lbs.
- Show is in four weeks
- Proper show weight is 125 to 130 lbs.
- $ADG = 130 - 115 = 15$  lbs.
- $15 \text{ lbs.} \div 28 \text{ days} = .54 \text{ lbs./day}$
- Feed is 50% alfalfa hay & 50% commercial feed
- See Table on Slide 6 for TDN percentage.
- See Table “Minimal Feed Amounts Required for Show Lambs” on Slide 8 in this presentation for total lbs. feed.

# Lamb Examples

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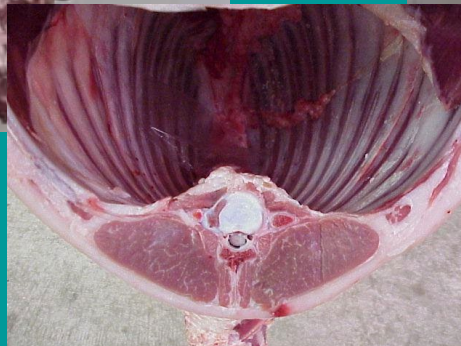
# Lamb Examples

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[ars.sdstate.edu/ classes/AS101/01%20Beef%20Evaluation%20and%20sheep%20eval.ppt](http://ars.sdstate.edu/classes/AS101/01%20Beef%20Evaluation%20and%20sheep%20eval.ppt)

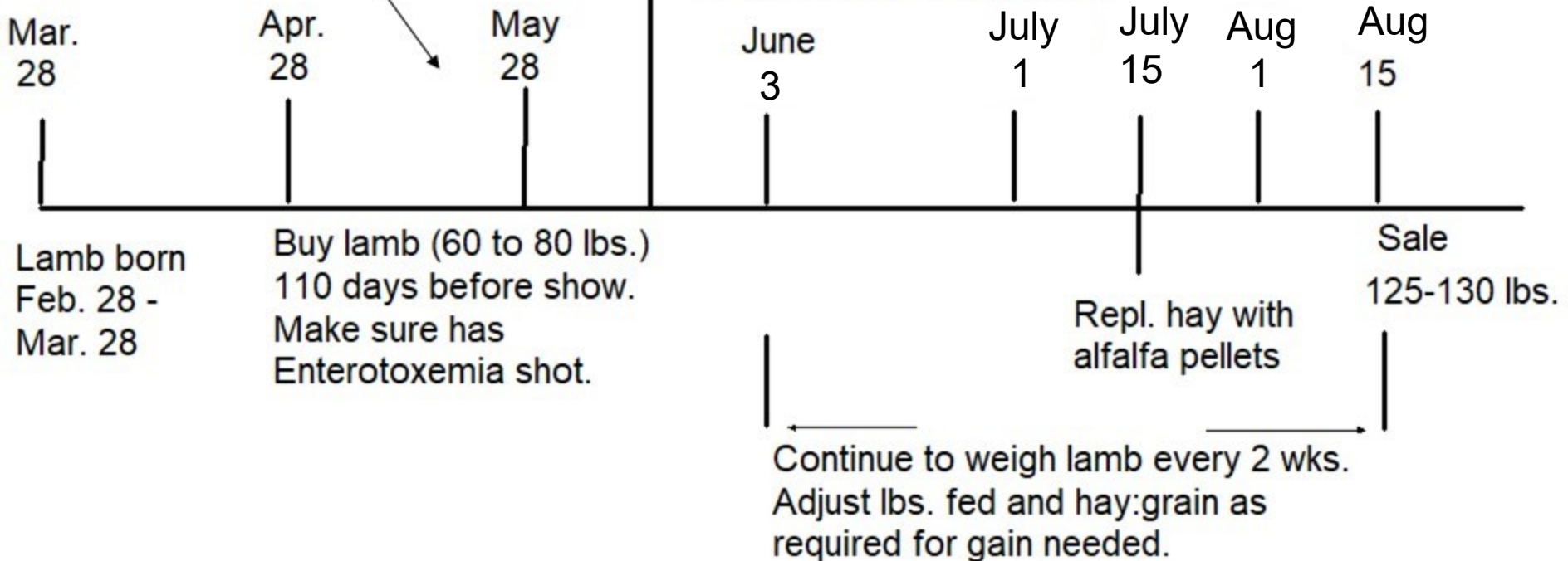


# Fall Show Lamb Timeline

Enterotoxemia booster  
 Weigh lamb  
 Start halter breaking  
 Start exercise program  
 Adjust grain ration from  
 40 to 60% of diet as needed.

Grain Step Ups:  
 .25 lbs. grain, 3 days  
 .50 lbs. grain, 3 days  
 1.0 lbs. grain, 3 days  
 1.5 lbs. grain, 3 days, then hold  
 If more grain is needed, feed each  
 10% increase in grain at least 7 days  
 For 4-H lambs, 40 to 50% grain is  
 the norm, never more than 70%

**Weigh lamb**  
**Adjust feed as needed**  
**for lbs. fed and hay:grain**





*Thank You*



- For more information, see <http://ag.arizona.edu/pubs/animal/az1053.pdf>