PROPER FEEDING OF

EWES & DOES DURING PREGNANCY

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INTRODUCTION TO PREGNANCY IN EWES AND DOES

Ewe Pregnancy Duration: 145-152 days (approximately 5 months)

Doe Pregnancy Duration: 150-155 days

Understanding body condition and nutritional needs throughout gestation is vital in maintaining a healthy pregnancy and live births.

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SHEEP GESTATION TABLE

BASED ON 145 DAYS

Date of Service	Watch for Lambs	Date of Service	Watch for Lambs	Date of Service	Watch for Lambs	Date of Service	Watch for Lambs	Date of Service	Watch for Lambs	Date of Service	Watch for Lambs
Jan. 1	May 26	Feb. 1	Jun. 26	Mar. 1	Jul. 24	Apr. 1	Aug. 24	May 1	Sep. 23	Jun. 1	Oct. 24
Jan. 2	May 27	Feb. 2	Jun. 27	Mar. 2	Jul. 25	Apr. 2	Aug. 25	May 2	Sep. 24	Jun. 2	Oct. 25
Jan. 3	May 28	Feb. 3	Jun. 28	Mar. 3	Jul. 26	Apr. 3	Aug. 26	May 3	Sep. 25	Jun. 3	Oct. 26
Jan. 4	May 29	Feb. 4	Jun. 29	Mar. 4	Jul. 27	Apr. 4	Aug. 27	May 4	Sep. 26	Jun. 4	Oct. 27
Jan. 5	May 30	Feb. 5	Jun. 30	Mar. 5	Jul. 28	Apr. 5	Aug. 28	May 5	Sep. 27	Jun. 5	Oct. 28
Jan. 6	May 31	Feb. 6	Jul. 1	Mar. 6	Jul. 29	Apr. 6	Aug. 29	May 6	Sep. 28	Jun. 6	Oct. 29
Jan. 7	Jun. 1	Feb. 7	Jul. 2	Mar. 7	Jul. 30	Apr. 7	Aug. 30	May 7	Sep. 29	Jun. 7	Oct. 30
Jan. 8	Jun. 2	Feb. 8	Jul. 3	Mar. 8	Jul. 31	Apr. 8	Aug. 31	May 8	Sep. 30	Jun. 8	Oct. 31
Jan. 9	Jun. 3	Feb. 9	Jul. 4	Mar. 9	Aug. 1	Apr. 9	Sep. 1	May 9	Oct. 1	Jun. 9	Nov. 1
Jan. 10	Jun. 4	Feb. 10	Jul. 5	Mar. 10	Aug. 2	Apr. 10	Sep. 2	May 10	Oct. 2	Jun. 10	Nov. 2
Jan. 11	Jun. 5	Feb. 11	Jul. 6	Mar. 11	Aug. 3	Apr. 11	Sep. 3	May 11	Oct. 3	Jun. 11	Nov. 3
Jan. 12	Jun. 6	Feb. 12	Jul. 7	Mar. 12	Aug. 4	Apr. 12	Sep. 4	May 12	Oct. 4	Jun. 12	Nov. 4
Jan. 13	Jun. 7	Feb. 13	Jul. 8	Mar. 13	Aug. 5	Apr. 13	Sep. 5	May 13	Oct. 5	Jun. 13	Nov. 5
Jan. 14	Jun. 8	Feb. 14	Jul. 9	Mar. 14	Aug. 6	Apr. 14	Sep. 6	May 14	Oct. 6	Jun. 14	Nov. 6
Jan. 15	Jun. 9	Feb. 15	Jul. 10	Mar. 15	Aug. 7	Apr. 15	Sep. 7	May 15	Oct. 7	Jun. 15	Nov. 7
Jan. 16	Jun. 10	Feb. 16	Jul. 11	Mar. 16	Aug. 8	Apr. 16	Sep. 8	May 16	Oct. 8	Jun. 16	Nov. 8
Jan. 17	Jun. 11	Feb. 17	Jul. 12	Mar. 17	Aug. 9	Apr. 17	Sep. 9	May 17	Oct. 9	Jun. 17	Nov. 9
Jan. 18	Jun. 12	Feb. 18	Jul. 13	Mar. 18	Aug. 10	Apr. 18	Sep. 10	May 18	Oct. 10	Jun. 18	Nov. 10
Jan. 19	Jun. 13	Feb. 19	Jul. 14	Mar. 19	Aug. 11	Apr. 19	Sep. 11	May 19	Oct. 11	Jun. 19	Nov. 11
Jan. 20	Jun. 14	Feb. 20	Jul. 15	Mar. 20	Aug. 12	Apr. 20	Sep. 12	May 20	Oct. 12	Jun. 20	Nov. 12
Jan. 21	Jun. 15	Feb. 21	Jul. 16	Mar. 21	Aug. 13	Apr. 21	Sep. 13	May 21	Oct. 13	Jun. 21	Nov. 13
Jan. 22	Jun. 16	Feb. 22	Jul. 17	Mar. 22	Aug. 14	Apr. 22	Sep. 14	May 22	Oct. 14	Jun. 22	Nov. 14
Jan. 23	Jun. 17	Feb. 23	Jul. 18	Mar. 23	Aug. 15	Apr. 23	Sep. 15	May 23	Oct. 15	Jun. 23	Nov. 15
Jan. 24	Jun. 18	Feb. 24	Jul. 19	Mar. 24	Aug. 16	Apr. 24	Sep. 16	May 24	Oct. 16	Jun. 24	Nov. 16
Jan. 25	Jun. 19	Feb. 25	Jul. 20	Mar. 25	Aug. 17	Apr. 25	Sep. 17	May 25	Oct. 17	Jun. 25	Nov. 17
Jan. 26	Jun. 20	Feb. 26	Jul. 21	Mar. 26	Aug. 18	Apr. 26	Sep. 18	May 26	Oct. 18	Jun. 26	Nov. 18
Jan. 27	Jun. 21	Feb. 27	Jul. 22	Mar. 27	Aug. 19	Apr. 27	Sep. 19	May 27	Oct. 19	Jun. 27	Nov. 19
Jan. 28	Jun. 22	Feb. 28	Jul. 23	Mar. 28	Aug. 20	Apr. 28	Sep. 20	May 28	Oct. 20	Jun. 28	Nov. 20
Jan. 29	Jun. 23			Mar. 29	Aug. 21	Apr. 29	Sep. 21	May 29	Oct. 21	Jun. 29	Nov. 21
Jan. 30	Jun. 24			Mar. 30	Aug. 22	Apr. 30	Sep. 22	May 30	Oct. 22	Jun. 30	Nov. 22
Jan. 31	Jun. 25			Mar. 31	Aug. 23			May 31	Oct. 23		

Body Condition Scoring

Get your hands on them!!

FIGURE 1
Feel for the spine in the centre of the sheep's back, behind its last rib and in front of it's hip bone.

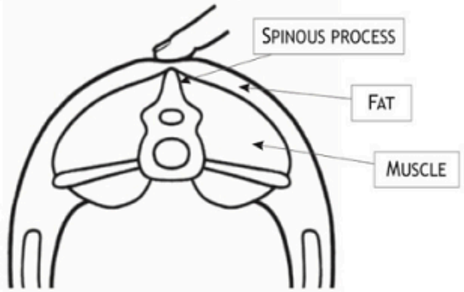


FIGURE 2
Feel for the tips of the transverse processes.

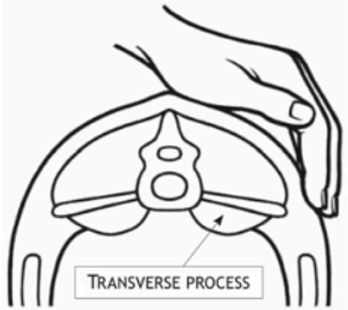
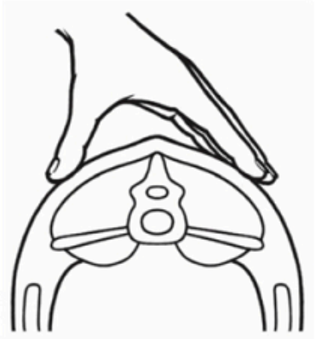
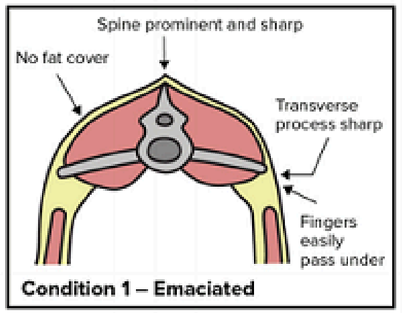
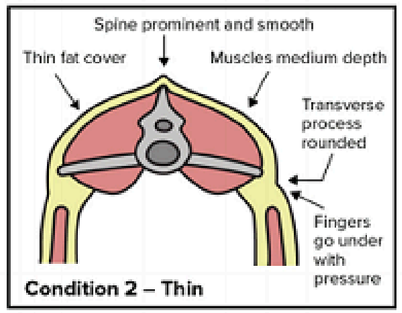
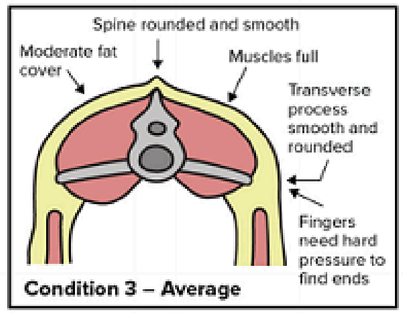


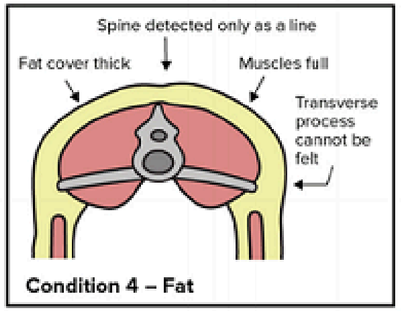
FIGURE 3
Feel for fullness of muscle and fat cover.











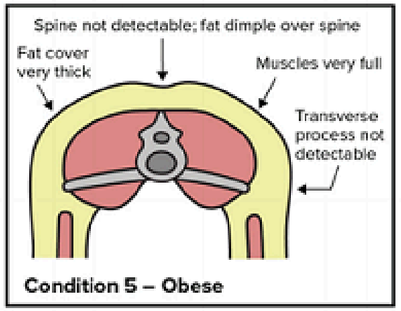
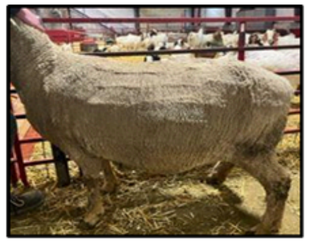


Table 1. Body Condition Score (BCS) descriptions and visual examples of recently shorn ewes.

BCS 1: Emaciated Spine and hips are prominent and individual ribs can be felt and seen when wool is short. The Paralumbar fossa is noticeably seen and caved in with no fat covering. There is not a lot of fat in the neck or shoulder region.		
BCS 2: Thin Spine and hips are still prominent. Ribs are not as easily seen but can still be felt with palpation. Paralumbar fossa is still significantly noticeable but not as caved in with a little more fat coverage. Neck and shoulder region is still free of fat.		
BCS 3: Moderate Noticeably more fat coverage over the spine, hips and ribs. Spinal processes can still be felt with palpation but the notice of individual spinal processes is more difficult. Paralumbar fossa is beginning to be covered with fat, still noticeable but not extremely caved in. Neck and shoulder regions have a heavier fat coverage.		
BCS 4: Fat Spine and hips are not seen. Individual spinal processes are not felt during palpation. Fat coverage over spinal processes produces a flat back. Even more fat covering over paralumbar fossa, can still be palpated and appreciated. There is a noticeable difference in the amount of fat in the neck and shoulder region.		
BCS 5: Obese Spine, hips and ribs can not be seen or felt. Fat is noted over the tail head and there is a dip running down the spin due to fat. Paralumbar fossa not appreciated, highest amount of fat coverage. The neck and shoulder region has an appreciated layer of fat coverage.		

Natural Change in Body Condition

- Body Condition will fluctuate naturally throughout the year
- Knowing the production of your ewes will allow you to anticipate nutritional needs and prepare to bring those ewes back to an ideal BCS
- The amount of additional weight an animal needs to put on to increase 1 BCS is approximately 14% of their mature weight.
- Example: A normally 175 lb mature ewes at a BCS 2 may be closer to 150 lbs

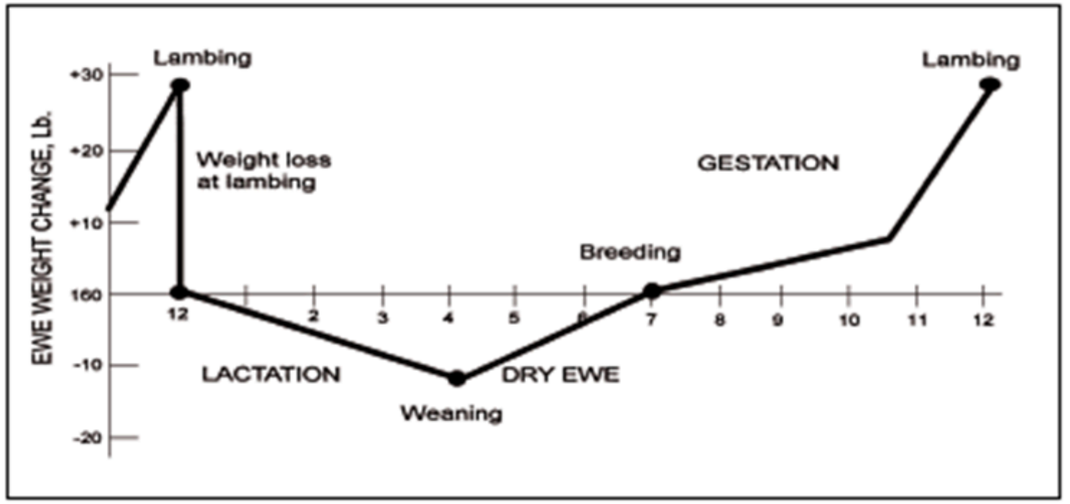
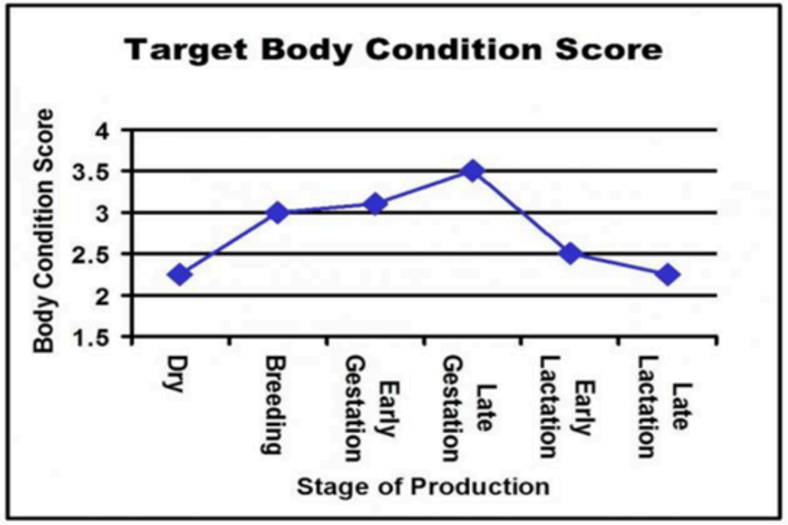


Figure 13. Stage of Production and Estimated Body Weight Changes.



NUTRIENT REQUIREMENTS

WATER

CARBOHYDRATES

FATS

PROTEIN

VITAMINS & MINERALS

EARLY TO MID GESTATION

Placental development occurs in the first 30-90 days of pregnancy

Underdeveloped placentas result in low birth weights

21 days of severe underfeeding or 80 days of moderate underfeeding can affect placental development

Do not overfeed or underfeed.

Ideal body condition score 3-3.5

WATER

Cheapest Nutrient to Supply!!!

- Know your animals water requirements
  - Stage of production (maintenance vs peak lactation
  - Temperature and Season
  - Feed type and Dry Matter content
  - Water quality

- Water intake dictates feed intake

TABLE 1. WATER REQUIREMENTS FOR EWES (GALLONS/DAY)

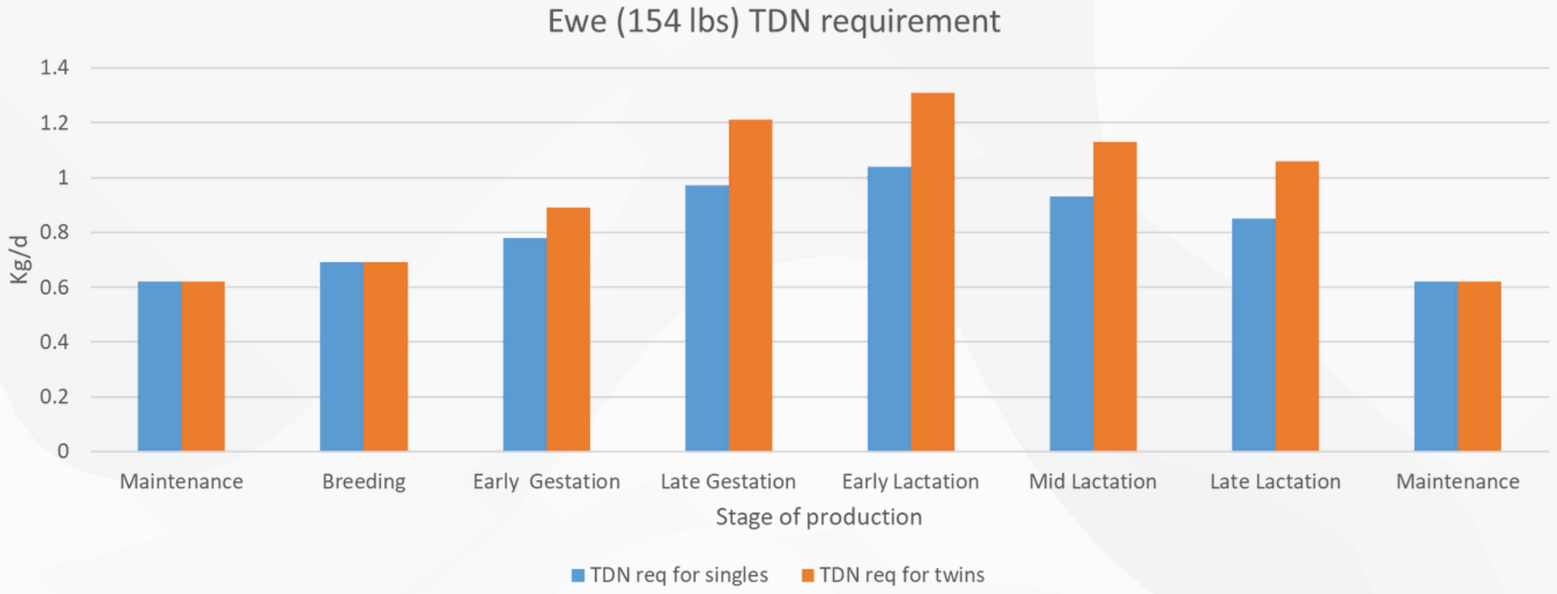
	Ewe body weight		
	130 lb.	**160 lb.**	**200 lb.**
Maintenance	0.60 - 0.82	0.70 - 0.96	0.83 - 1.13
Pregnancy	1.21 - 1.63	1.41 - 1.90	1.67 - 2.25
Lactation	2.02	2.36	2.79

Calculated from NRC, 2007: Maintenance: 107-146 mL/kgBW$^{0.75}$, Pregnancy: 215-290 mL/kgBW$^{0.75}$, Lactation: 359 mL/kgBW$^{0.75}$

CARBOHYDRATES
AKA ENERGY (TDN)

	Dry Matter Intake lbs.	Crude Protein lbs.	TDN (energy) lbs.
Maintenance	2.60	0.196 (7.5%)	1.36 (52.3%)
Late gestation, single lamb	3.96	0.343 (8.6%)	2.11 (53.1%)
Early Lactation, single lamb	4.31	0.504 (11.6%)	2.22 (51.5%)
Late gestation, twins	4.01	0.422 (10.5%)	2.66 (66.3%)
Early lactation, twins	4.36	0.674 (15.5%)	2.88 (66.1%)

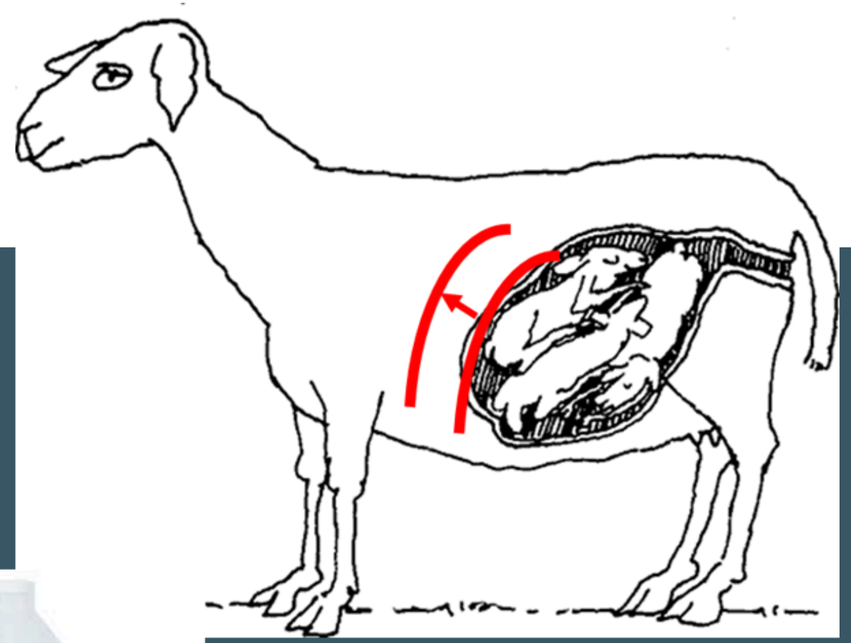
Table 1. Nutrient Requirements for a 154 lb. Ewe



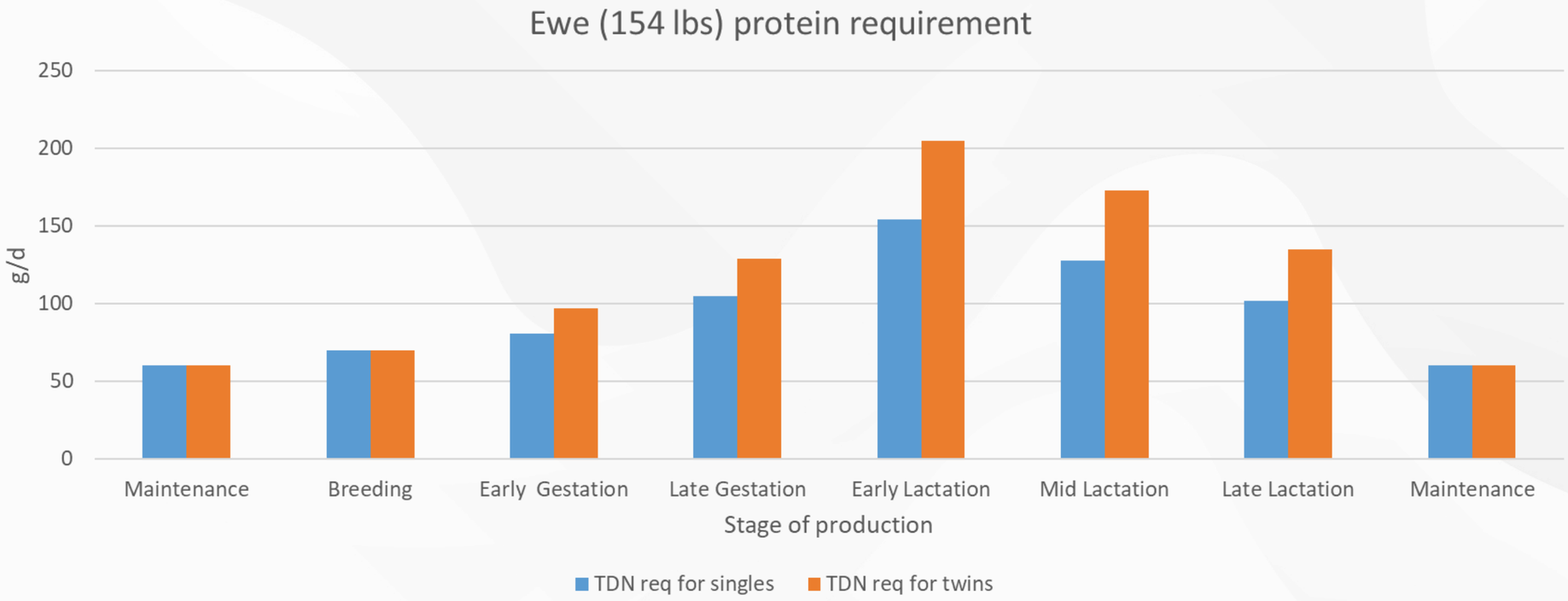
Barkley, Melanie. 2024 Nutrition Throughout Pregnancy. Pen State University Extension

Pregnancy Toxemia

- Pregnancy toxemia = twin lamb disease = ketosis
- Cause inadequate energy intake during late gestation, generally in ewes carrying multiple lambs
- **Prevention/Treatment**
  - Adequate nutrition of ewes in late gestation. Reduce particle size or offer an energy source like grain
  - Early stages – 60 ml of propylene glycol orally twice/day for 3 days



PROTEIN REQUIREMENTS



VITAMINS & MINERALS

Selenium

Most soils are selnium defecient and can lead to white muscle diease if not supplements

Calcium

Calcium deficiencies can lead to milk fever. Calcium in grain is low but generally higher in alfalfa hay

Zinc

Zinc deficiencies can lead can cause negative effects in reproduction, gene expression, immune function and wool growth

Vitamins A,D&E

Sheep and goats don't naturally make these vitamins so supplementing especially during late gestation and lactation is important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PROTEIN
TUBS
USE DURING
LATE GESTATION
LACTATION
GROWTH PHASE
BIOZYME
Crystalyx
Goat-lyx®
PURINA
WIND AND RAIN
SHEEP MINERAL
NET WT. 50 lb (22.67 kg)
DURAFERM
strengthen your stock

LATE GESTATION

ENERGY REQUIREMENT

Increases 50% for single lamb

Increases 75% for multiples

QUALITY OF FEED

Due to decreased rumen capacity ewes and does can not consume as much therefore require supplementation of higher quality feed. aka grain

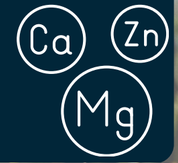
MAINTAINING BCS

Keeping ewes and does at proper body condition scores of 3-3.5 just before lambing.

MINEARALS

Mineral requirements for the ewe/doe and fetus increase

- Selenium
- Calcium
- Zinc



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Examples of late gestation feed rations are:

3.5 to 4 lbs. of medium to good quality hay plus 1.25 to 1.5 lbs. of concentrate.

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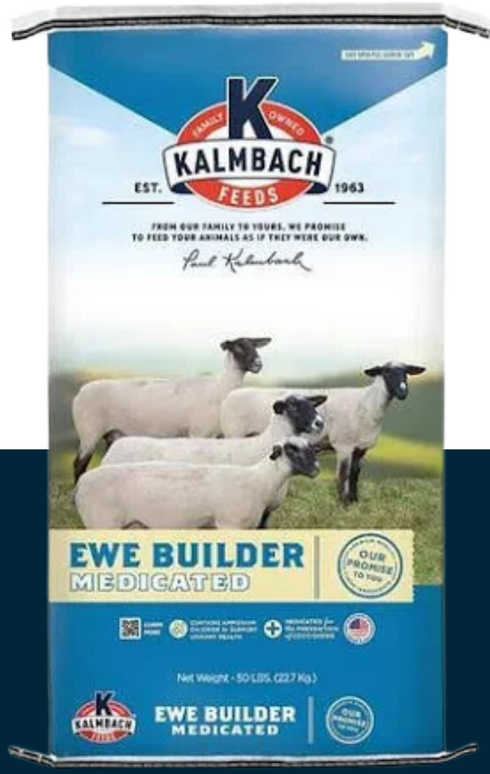
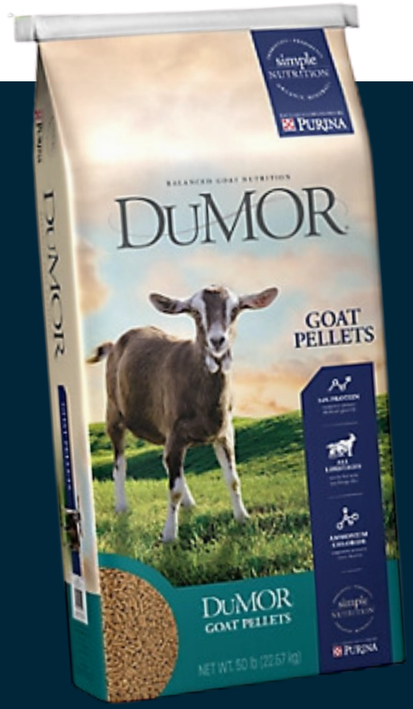
4 to 5 lbs. of medium quality hay or pasture equivalent plus 0.5 to 1 lb. of concentrate .

Limit the roughage intake of ewe lambs and doe kids and mature females carrying 3 or more fetuses and feed 1 lb. of grain per fetus.

CONCENTRATE
FEEDS





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Suggested lambing and kidding supplies - Washington State University Late gestation ewe...

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