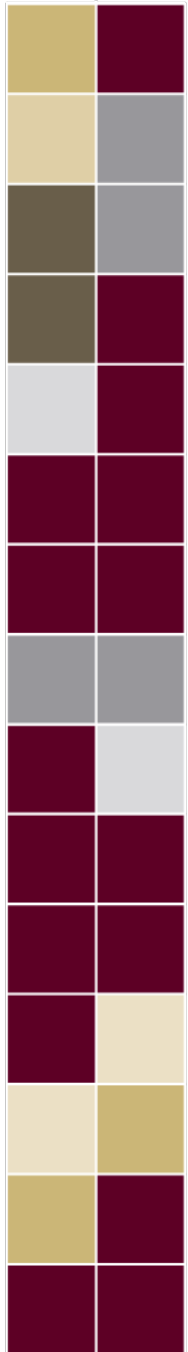


MARKET LAMB NUTRITION



GAME PLAN

- Purchase date & show date = time on feed
- Purchase weight & show weight = total gain
Frame size/growth potential – show weight
- Gain – lbs/day
 - Lambs – $\frac{1}{2}$ to $\frac{3}{4}$ lb/day
- Feed requirement – light, moderate, heavy
 - 2 to 4 lb/day



NUTRIENTS

- Water
- Protein
- Energy – fats & carbohydrates
- Minerals
- Vitamins



WATER

- Most critical of all nutrients
- Primary roles – maintenance of body temperature, transport of nutrients and waste, establishment of an appropriate medium for the many chemical reactions that must take place



WATER (cont.)

- Makes up more than 70% of lean tissue
 - Pulling water = losing muscle
 - Potential for urinary calculi
- Regulates feed consumption
 - Pulling water = decreased consumption
- 1-1.5 gallons for each 4 lb of DM consumed
- **Clean, fresh water a must!**



PROTEIN

- Primary constituent of animal body
- Primary roles – body tissue maintenance, provides for carriers of other nutrients, and is a major component of meat, milk, and fiber
- Quantity more important than quality
 - Bypass protein vs. rumen degradable protein
- Young, fast growing animals require more protein



PROTEIN (cont.)

- Blood, feather, fish, poultry by-products, and meat meals – 50 to 90%
- Soybean, cottonseed, sunflower, linseed, and peanut meals – 35 to 50%
- Legume hays – 15 to 25%
- Grains – 8 to 13%
- Urea – non-protein nitrogen



PROTEIN (cont.)

- Protein in excess of requirement is used as energy
- Using protein as an energy source is very expensive



ENERGY (carbohydrates & fats)

- Most common limiting nutrient
- Necessary for efficient nutrient utilization. Inadequate energy reduces growth and causes weight loss
- Grains and protein supplements are high in energy while hays are intermediate



MINERALS – MACRO

- Sodium, chlorine, calcium, phosphorus, magnesium, potassium, and sulfur
- Salt (sodium and chlorine) can be fed free choice or ½ to 1 percent of ration
- 2:1 calcium to phosphorus ratio
- Urinary calculi caused by rations high in phosphorus in relation to calcium



MINERALS – MACRO (cont.)

- 10 to 15 lb ammonium chloride per ton of feed helps prevent urinary calculi
 - Extra ammonium chloride added to feed or water is not good
- Roughages – high Ca, low P
- Grains – low Ca, intermediate P
- Protein supplements – intermediate in Ca, high in P



MINERALS - MICRO

- Iodine, copper, iron, manganese, zinc, molybdenum, cobalt, selenium, and fluoride
- Copper levels above 11 ppm can be toxic to sheep
 - Watch adding several supplements because they can contain copper



VITAMINS

- Dietary vitamins A, D, and E
- Microorganisms synthesize B-vitamins, C, and K
- Dietary sources of B-vitamins and vitamin K are required by young before the rumen becomes functional
 - Can be useful to give added B-complex injections monthly
 - Stimulates appetite and reduces possibility of thiamin deficiency



“MAGIC” RATION

- No such thing as a “Magic” ration
 - Fixed cost versus fixed ingredient
- Commercially prepared ration - balanced
- Mix your own
- County ration mixed and sold by local feed store

- **Key – find a balanced ration, weigh it out, learn how to feed it, learn how animals respond to it**



COMPLETE FEEDS

- Complete balanced diet – protein, energy, minerals, vitamins, fiber
- Fresh and palatable; minimal dust/fine particles
- Lambs – textured or loose feed
- Typically 14-16% crude protein; no urea



COMPLETE FEEDS (cont.)

- Fiber – 10 to 15%
 - Needed for rumen health
- Fat – 2.5 to 4%
 - Higher fat levels give more “bloom”
- Ca:P ratio \geq 2-3:1
 - Prevention of urinary calculi
- P content 0.38 to 0.45%
 - Higher levels cause rectal prolepses



COMPLETE FEEDS (cont.)

- Urinary acidifier (0.5%)
 - Ammonium chloride more effective than ammonium sulfate
- Coccidiostat
 - Deccox – prevent coccidiosis
 - Doesn't prevent the problem only helps reduce incidence of coccidia
- Fed at 1.5 to 4.0% of body weight



MANAGEMENT AND FEEDING

- Getting started on feed and water
 - Never run out of either one
- Self fed (ad libitum) vs. hand fed
 - Individual feeding stalls – keep track of intake
 - Can feed together but must watch animals closely
- Feeding hay – keeps rumen and microbes happy
 - Small handful every other day
 - Will decrease risk of thiamine deficiency
 - Help prevent wool picking in sheep
- Feeding regularly (2X/day, at the same time each day)



MANAGEMENT AND FEEDING

- Weigh animals regularly
 - Monitor weight as you go along
- Lambs – breed differences
 - eat at different speeds
- Exercise – any type is better than none at all



MANAGEMENT AND FEEDING

- The feeding program will dictate how your animals will develop and mature
- A good feeding program cannot make up for a lack of superior genetics, but it will allow your animal to reach their genetic potential
- A poor feeding program can cause an animal with great genetic potential to be wasted.



FEEDING FOR THE “BIG” SHOW

- Start 30 to 45 days before show
 - Weighing animals = predicted weight at shows
 - Know where you stand at home and previous weight breaks at show
- 2 to 3 weeks before show start regulating feed and exercise
 - Goal is to have them where want them before you leave the house.
 - Too heavy = decrease in feed or Inc. in exercise
 - Feed and water at show – athletes don’t change programs before a contest



FEEDING FOR THE “BIG” SHOW

- Using supplements
 - Decrease normal feed volume but retain energy levels
- Many different supplements available
 - Add bloom
 - Decrease fat
 - Learn how to use them before you get to the show
 - Animals all react different to stress
 - Previous show experience will help animals



AT THE SHOW

- I feed hay - doesn't weigh much, keeps the animal feeling full
- I give lot's of water – 20 to 60 oz/ day
- Watch the level of electrolytes
 - Can actually dehydrate the animal
- Monitor weight
 - Most animals will loose $\frac{1}{2}$ to 1 lb overnight



AT THE SHOW

- Several shows starting to have you turn in your own weights
 - Must do your homework before you get to the show
 - Know which class you want the animal to fall into



AT THE SHOW

- Most common problems
 - Not enough feed and water
 - Too much electrolytes
 - Too much “stuff”
 - Too much “fiddling around”
 - Get the animal where you want him and leave him alone.