Using the Langston University Goat Institute’s Nutritional Calculator
to calculate rations

Class Exercise

Log on to www2.luresext.edu
Select the goat in the middle
Go to Nutrient Calculators
Select Producer Version Calculator

1. Calculate the nutrient requirements for a dry, open, mature Boer doe with a 32" heartgirth under intensive grazing management. She has a body condition score of 2.5.

A. How much does she weight? ______

B. Requirements for TDN_______ CP_______ DMI_______ Calcium_______
    Phos_______

C. Can she meet her nutrient requirements from early summer range? ________

D. What nutrients is she deficient in?___________ ___________ ________.

E. Let us supplement her with 2.0 lbs of whole shelled corn per day and .05 lbs of a 12-12 mineral mix. Don’t forget to reduce the early summer range to keep intake at the right level. This is about the most grain that we can feed her without causing digestive upsets.

F. Can we meet her energy requirements? __________

G. What will happen to her body weight? __________

H. Calculate the doe’s requirements except allow that she will lose 2 lbs of bodyweight/month.

I. Can we meet these requirements with early summer range?

J. Can we accept losing 2 lbs of bodyweight per month?

3. Calculate her requirements if she is 125 days pregnant with twins.

A. Requirements for TDN_______ CP_______ DMI_______ Calcium_______
    Phos_______

B. How much Bermuda grass hay and 20% Range cubes are required?

    Hay_______ Cubes_______
4. Now let us pretend she is nursing kids. Calculate her requirements if she is in the 4th week of lactation producing 7 lbs of 3.5% fat and 3.2% protein milk and is 4 years old.

   A. Requirements for TDN _______ CP _______ DMI _______ Calcium _______
       Phos ______

   B. Input (user defined forage) ryegrass pasture  20% DM, 14% Crude Protein, 20%
       rumen undegraded intake protein and 78% TDN.

   C. Will this meet her nutrient requirements?

5. Calculate the requirements for an Alpine Dairy suckling doe kid weighing 20 lbs and
   gaining 4 lbs/month.

   A. Requirements for TDN _______ CP _______ DMI _______ Calcium _______
       Phos ______

   B. How many lbs. Of 3.4% milk will it take to support these gains?