

Feed Analysis

1. A student wants to determine the water content of alfalfa. A fresh sample weighing 1200 grams was dried overnight. The dried sample weighed 825 grams. Calculate the % water and the % dry matter.

2. A feed sample was analyzed to contain 9.0% water, 1.84% nitrogen (DM basis) and 7.3% ether extract (DM basis). If an animal consumed 8.0 lb of this feed per day, how much crude protein was taken in daily? How much fat was the animal consuming per day?

3. Calculate the % NFE of the following feedstuff.

% water	= 12.0%
% nitrogen	= 2.11%
% EE	= 2.20%
% CF	= 2.40%
% Ash	= 1.60%

4. What type of feed would you guess this is and why?

5. Calculate the TDN content of the following feed. The feed composition is (all on DM basis):
 % DM = 88.0%
 % Ash = 3.0%
 % N = 1.6%
 % EE = 4.1%
 % CF = 10.8%
6. Why isn't ash included in the nutrients used to calculate TDN?
7. Why is fat multiplied by 2.25 in the TDN calculation?
8. Using the laboratory analyses of the following forage samples, predict the DMI, DDM, RFV, TDN, and TDN intake for a 1,300 lb beef cow.

Forage	Alfalfa hay, 2 nd cutting	Barley hay	Native range hay	Corn silage
ADF, % (DM basis)	30.0	35.0	39.0	12.0
NDF, % (DM basis)	46.0	58.0	66.0	41.0
Predicted:				
DMI, %BW				
DMI, lb/day				
DDM, %				
RFV, %				
TDN, %				
TDN intake, lb/day				