

## **Forage Quality**

(Chapter 16, pg 363-390)

*Why?*

- Animal production .....
- Animal intake = .....
  - .....
  - ..... with better quality forage
  - At ..... most livestock are constrained by  
....., higher intake (.....) is only  
possible with .....
- Quality determines .....
- Yield is not enough
- Maximum yield does not always coincide with maximum quality

*Animal factors affecting diet quality*

- Animal breed
  - .....
  - .....
  - .....
- Diet selection .....

.....  
Palatability – ....., summation of factors affecting  
animal preference (.....), otherwise nutritious  
forage may have low palatability

**Energy flow**

*Forage factors affecting quality*

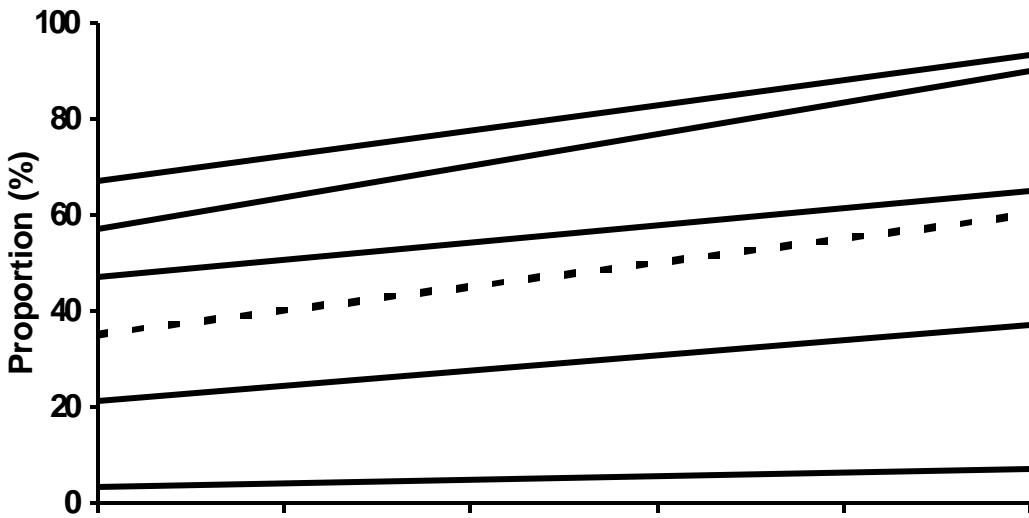
- .....
- ..... (esp legumes)
- .....
- .....
- .....

*Cell chemical components of quality*

- Energy
- Protein
- Minerals/nutrients
- Anti-quality factors

**Cellular Components**

**Maturity**



*Measuring quality*

- Animal
  - .....
  - .....
- Visual appraisal
  - Leafiness .....
  - Color .....
  - Plant staging .....
  - .....
- Lab analysis
  - Proximate analysis (pg370)
  - Van Soest analysis (pg 372)
    - ADF .....
    - NDF .....
  - NIR (pg 374)
  - .....
  - .....

Relative feed Value

$$RFV = [(120/NDF)*(88.9-0.779*ADF)]/1.29$$

100 = mid bloom alfalfa

.....  
.....  
.....

40:30:20 NAP Rule	
40%	.....
30%	.....
20%	.....