

CLASSIFICATION OF CATTLE FEEDS

Feeds can be broadly classified into
Roughages and Concentrates

Roughages

a) Wet

- i. Pasture, green chop
- ii. Silage, haylage

b) Dry

- i. High >10% CP- Grass legume hays, alfalfa hay, other legumes
- ii. Low <10% CP- Mature hay, peanut hulls, cereal straw



Concentrates

- a) Energy- Corn, barley, oats, wheat, molasses, tallow, milo (sorghum), potato waste
- b) Protein- Soybean meal, cottonseed meal, corn gluten feed, brewer's grains
- c) Vitamins/Minerals- Limestone, dicalcium phosphate, TM salt, vit, pre-mix

Roughage/Forage

Pasture, stockpiled forage, hay, silage, crop residues, and straws should make up a majority of the beef cow's diet.

Pastures and stockpiled forage can often meet or exceed the protein and energy needs of most cows, even lactating cows. Hays are usually adequate to marginal in energy and protein. Legume hays are high in protein. Silage from corn or sorghums are moderate to high in energy and low in protein. Straw and some crop residues may provide limited amounts of energy, but are very deficient

in protein. Peanut hulls may supply little more than fibre to maintain rumen function.

Concentrates-Energy Feeds

Grains are high in energy and low to moderate in protein content. Corn is the standard energy feed to which all others are compared, and is the most widely fed grain. Small grains like barley and oats have 85-95% of the energy value of corn, and they are higher in protein. Wheat is rapidly digested in the rumen and should not be fed at high levels.

Molasses has 80% of the energy of corn and contains 14% more moisture. It is primarily a palatability enhancer or a carrier for other products such as minerals. It tends to be expensive per unit of energy.

Fats and oils contain 2 to 2.25 times the amount of energy per pound as corn, but they should be used sparingly in cattle diets. Diets containing more than 5% fat can impair rumen function.

High energy by-products include soybean hulls, hominy, distiller's grains, brewer's grains, corn gluten feed and wheat middlings. The availability and cost of these by-products vary considerably depending on your location; however, they can often be a very economical source of energy. Some like corn gluten, brewer's grains, and distiller's grain also are moderate in protein content.

Concentrates-Protein Feeds

Soybean meal is the principal supplementary protein source in many livestock diets. It is a well-balanced natural protein with some by-pass properties. Whole soybeans, roasted or raw, can also be fed to cattle, but they have a high fat content. Raw soybeans contain a protein digestion inhibitor so they should be

used sparingly. Whole soybeans contain about 15% less protein than soybean meal.

Cottonseed meal is another good source of protein. Cottonseed meal is slightly lower in protein content than soybean meal. Whole cottonseed is also high in energy and fibre. Whole cottonseeds may also be fed to cattle, but whole cottonseed contains only half the protein of cottonseed meal and are high in fat.