

Supplement Use Guidelines for Beef by Stage of Production

Supplement - <i>Supplies</i>	Stockers, 400 - 800 lbs.	Finishing	Breeding Cattle
Corn - <i>energy</i>; ground, cracked or whole; TDN:CP = 8.9	.25 - .5% body weight; 1 - 1.5% body weight; see #1 below	A primary feedstuff - not considered a supplement	.25 - .5% body weight; 1 - 1.5% body weight; see #1 below
Grain Sorghum - <i>energy</i>; ground; TDN:CP = 8.3 - 11.03	.25 - .5% body weight; 1 - 1.5% body weight; see #1 below	A primary feedstuff - not considered a supplement	.25 - .5% body weight; 1 - 1.5% body weight; see #1 below
Whole soybeans - <i>protein, energy, fat</i>; TDN:CP = 2.3	5 - 10% of ration dry matter recommended - do not use with urea	Max. 24% of ration dry matter - do not use with urea	Max. 24% of ration dry matter - do not use with urea
Corn gluten feed - <i>protein, energy</i>; see #2 below; TDN:CP = 3.2	Up to 1% body weight or 60% ration dry matter	Replace Up to 70% of grain	Up to 60% ration dry matter
Soyhulls - <i>energy, limited protein</i>; TDN:CP = 5.3	Up to 1% body weight or 40% ration dry matter	25 - 50% ration dry matter - can reduce diet energy level	Up to 40% ration dry matter - do not exceed 12 lbs./d
Distillers dried grains - <i>protein, rumen by-pass protein, energy</i>; see #3 below; TDN:CP = 3.5	Up to 1% body weight or 40% ration dry matter	Protein supplement - 6 - 15% diet dry matter; energy replacement - Up to 40% corn or milo	Up to 40% ration dry matter - do not exceed 12 lbs./d
Soybean Meal - <i>protein</i>; TDN:CP 1.6	Up to .6% bodyweight	Up to .6% bodyweight	Up to .6% bodyweight
#1 - Low quality forages (<7% CP) will require protein supplementation along with the corn and grain sorghum. At the higher levels of use, it is viewed as substitution, not supplementation. Avoid using starch based feeds (corn, grain sorghum, wheat) at the rates of .6 to 1% of body weight - forage digestion and rumen function suffer - animal performance can be less than expected.			
#2 - If the sulphur level of the cattle's drinking water is high, do not use corn gluten feed at levels over 40% of the diet drymatter. Feeding diets with a high percentage of CGF becomes feed/forage substitution. As a protein supplement, best performance should occur if 50% of the protein in the diet comes from the forage.			
#3 - Feeding diets with high levels of DDGS becomes feed/forage substitution. As a protein supplement, best performance should occur if 50% of the protein in the diet comes from the forage.			
Note - Supplementation decisions should be based on price per unit for the nutrient needed. If additional protein is needed, compare supplements on a cost per unit of protein. If energy is needed, compare on a cost per unit of NEm, NEg, or TDN.			