

PROTEIN Crude Protein (**CP**) – The protein percentage listed in the guaranteed analysis of each SweetPro product. CP in ruminant diets has two forms.

One form, **RDP** (*rumen degradable protein*), is the type of protein that is digested in the rumen and provides amino acids and nitrogen (N) to the microbial population. *All SweetPro products have RDP. A portion of the RDP in FiberMate 18, 20, 28 and Magnum are of this type and a combination of ammonium sulfate and biuret (NPN – non-protein nitrogen).*

The other form of protein in CP is **RUP** (*rumen undegradable protein*), the type composed of amino acids that are available for absorption to the animal and not digested or degraded in the rumen.

RDP – ingredients in SweetPro products are a portion of DDGS, CDS & Corn Gluten Meal (also Ammonium Sulfate/Biuret (NPN) in FiberMate 18, 20, Super25 and Magnum)

RUP – ingredients in SweetPro products are a portion of DDGS, CDS & Corn Gluten Meal

ENERGY The forms of energy in SweetPro products that bring value to ruminants being fed forage-based diets are: Soluble Fiber (*NDF – neutral detergent fiber*) and Fat.

Soluble Fiber – NDF provides energy to ruminants without altering ruminal microbial populations. NDF provides energy to those microbial populations that increase the efficiency of their forage fiber digestion.

Fat – The fat in SweetPro products are vegetable oils, some of which is included in DDGS and CDS. This provides the animal with a source of unsaturated fatty acids; consumed in a slow, regular manner by licking motion.

VITAMINS The levels of Vitamin **A**, **D** and **E** in SweetPro products are: A - 100,000, D - 20,000 and E - 80 IU/lb (*IU/lb = international units per pound*). These levels are assured by additional amounts of each vitamin added to the base ingredients of DDGS, CDS, etc.

MINERALS Minerals in any supplement provided to livestock are inorganic elements required for metabolism to occur. In many cases the mineral is a cofactor required for an enzyme to perform its function.

The micro-minerals, (**Mn**) manganese, (**Zn**) zinc and (**Cu**) copper in SweetPro products are in sulfate and organic complexed form.

The macro-minerals in SweetPro products are: (**Mg**) magnesium – magnesium oxide, (**Ca**) calcium – monocalcium phosphate/calcium sulfate and (**P**) phosphorus – monocalcium phosphate.

MICRO-MINERAL INORGANIC SULFATES – The micro-minerals of Mn, Zn, and Cu in SweetPro products that are in the sulfate form. These are soluble available for metabolism.

MICRO-MINERAL ORGANIC COMPLEXES – The micro-minerals of Mn, Zn, and Cu in SweetPro products that are complexed to a polysaccharide/protein. These organic complexed minerals are absorbed with very good efficiency.