**What do my livestock projects need for nutrients?**

Water, Energy, Protein, Minerals and Vitamins

Water: is the most important of all nutrients. It is also the cheapest. Every living thing needs water. An animal can live much longer without feed than without water. Water is part of every cell in the body. In fact, our body is more than 2/3 water.

Water helps the body digest food and carry the nutrients to the tissues. It also helps get rid of waste materials. It is even used to keep the body cool.

So how much water does my project need:

Cattle: 350lb calf needs between 1 to 5 gallons per day

500lb calf needs 2 to 6 gallons per day

750lb calf needs 10 to 15 gallons per day

1000lb calf or more needs 20 or more gallons per day

Swine: Under normal conditions swine will consume 2 to 5 quarts of water per pound of dry feed or 7 to 20 quarts per 100lb of body weight daily. Keep in mind if it is hot that your pigs will need a lot more water.

Sheep/Goats: Ewes need 1 to 1.5 gallons per day more if lactating. Lambs that are being fattened 1.5 to 2 gallons per day. Probably more will be needed.

Rabbits: A doe and a litter may consume up to a gallon of water per day

Poultry: Poultry will drink twice as much water as feed. A flock of 20 may consume up to a gallon per day.

Energy nutrients: are the carbohydrates and fats. They furnish most of the energy fuel needed by the body. Energy is needed for growth, movement, and digestion of food. It is also needed to keep the body warm.

Protein: is used by the body to build muscle. It forms part of the nervous system and the skeleton. Protein can also be used as energy. When feed contains more protein than necessary the extra is used as energy

Minerals: are used mainly to build bones and teeth. Small amounts are also used to form blood, muscles and nerves. Livestock need 16 different minerals. However, most of the mineral content in an animal’s body is calcium and phosphorus. Other minerals are trace minerals and most generally the animals feed will contain enough to meet their needs. Salt often needs to be supplemented.

Vitamins: are nutrients that do not furnish energy or help build the body, but an animal must use small amounts of them everyday to grow and keep healthy. The animal’s body will produce some vitamins while others are supplemented in the feed. The most common ones are vitamin A, D and E.