

SUPPLEMENT SELECTION FUNDAMENTALS

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Beef cattle should obtain most of their nutrients from forage. However, if forage quality is below optimum or cattle requirements exceed the nutrient density of the forage, a supplement may be needed. Many supplement options are available. Consider the following in selecting the most appropriate supplement for your cattle.

! Base Supplement Need on a Forage Test

Forage testing, coupled with formulation of a balanced ration based on the test results, will assist in determining the supplement need. Ask your feed dealer or Extension agent how to get this done.

! Protein, Energy or Both?

Depending on the base forage and the nutrient requirements of the cattle, an energy or protein supplement may be needed or a balanced combination. One supplement does not fit all situations. This is why a forage test is critical to appropriate supplementation.

! Compare Cost of Nutrients

Many factors affect cost. After deciding which nutrients (protein, energy or both) are needed, feed the supplement that delivers those nutrients most economically. It is less expensive to purchase feeds in bulk, but transportation and storage are a problem for many producers. Supplements prepared to improve convenience such as blocks, tubs, cubes or tanks are often more expensive, but may be preferred because of time and/or labor savings.

! Protein Enhances Forage Intake.

Cattle consuming forages that are low in protein (below 7 to 8 percent) will increase forage consumption and use if supplemental protein is included in the ration.

! High-Starch Energy Supplements May Suppress Forage Consumption

Corn, barley and oats are relatively high in starch, which may decrease cellulose digestion in the rumen, resulting in lowered forage consumption. This has led many cattle producers to select alternative energy sources that are lower in starch such as commercial blends, soy hulls or whole cottonseed.

! Processing

Pelleting often improves shelf life, palatability and decreases dust, but pelleting occasionally damages nutrients and can hide substandard ingredients. Grinding, rolling, crimping, flaking, etc., are methods for enhancing feed use. In some cases, these processing steps are extremely beneficial.

Additional information on beef cattle nutrition can be obtained by contacting your local Agricultural Extension Service office or from the Extension-Beef, Sheep & Horse home page:
www.utextension.utk.edu/ansci