

## Lesson 5.3 Glossary

### C

**Calorie** – The heat necessary to raise the temperature of 1 gram of water one degree centigrade from 14.5° to 15.5° C.

**Calorimetry** – The measurement of heat.

**Concentrate** – Any feed high in energy (usually grain); sometimes used with reference to other nutrients, such as protein concentrate, etcetera.

**Crude fiber** – The part of feeds containing the cellulose, lignin, and other structural carbohydrates as determined by the proximate analysis.

**Crude protein** – A measure or estimate of the total protein in a feed determined by multiplying the total nitrogen content by 6.25.

### D

**Digestible energy (DE)** – The proportion of energy in a feed that can be digested and absorbed by an animal.

**Dry matter** – The total amount of matter, as in a feed, less the moisture it contains.

### E

**Energy** – The capacity to do work.

### F

**Feed** – Harvested forage, such as hay, silage, fodder, grain, or other processed feed for livestock.

**Feed analysis** – The chemical or material analysis of a commercially prepared feed, printed on a tag and fastened to the bag in which the feed is to be sold.

**Feedstuff** – One or a mixture of the substances that form the nutrients; namely, proteins, carbohydrates, fats, vitamins, minerals, and water. A feedstuff is different from a feed in that a feedstuff is not normally fed by itself but is mixed with other feedstuffs to formulate a feed. For example, soybean meal or fishmeal.

**Forage** – That portion of the feed for animals that is secured largely from the leaves and stalks of plants, such as the grasses and legumes used as hays. It may either be for grazing as green or standing dry herbage or be cut and fed green or preserved as dry hay.

### G

**Grain** – A small, hard seed, esp. the seed of a food plant such as wheat, corn, rye, oats, rice, or millet.

### H

**Hay** – Any leafy plant material, usually clover, fine-stemmed grasses and sedges, alfalfa, and other legumes, that has been cut and dried principally for livestock feeding.

### M

**Metabolizable energy (ME)** – The total amount of energy in feed less the losses in feces, combustible gases, and urine. Also called available energy.

## P

**Pasture** – A fenced or unfenced tract of land on which farm animals feed by grazing. The pasturage is mainly grass, but it may consist of various other herbs, brush, and trees.

**Proximate analysis** – A system of analysis used to determine the total composition of nutrients in feed.

## R

**Roughage** – Any food or feed high in fiber and low in digestible nutrients such as many fruits and vegetables, straw, and low-quality vegetation, hay, haylage, and silage. High-quality grass-legume pasturage and high-protein hay are more properly known as forage.

## S

**Silage** – A crop that has been preserved in moist, succulent condition by partial fermentation in a tight container above or below the ground. The chief crops stored this way are corn, sorghum, and various legumes and grasses. The main use of silage is in cattle feeding.

**Supplement** – A feed or feed mixture that is relatively higher in a specific nutrient than the basic feed ingredients in a ration to which it is added. It may be used to supply a single nutrient or may contain a mixture of vitamins, proteins, minerals, and other growth stimulants.

## T

**Total digestible nutrients (TDN)** – A standard evaluation of the usefulness of a particular feed for livestock which includes all the digestible organic nutrients; protein, fiber, nitrogen-free extract, and fat (the latter being multiplied by 2.24 because its energy value for animals is approximately 2.25 times that of protein or carbohydrates).