

GLOSSARY

Biological value (BV): Biological value is a measure of the proportion of absorbed protein from a food which becomes incorporated into the proteins of the organism's body. It captures how readily the digested protein can be used in protein synthesis in the cells of the organism.

Halophiles: Halophiles are organisms that thrive in high salt concentrations.

Humidity: Humidity is the amount of water vapor in the air.

Net protein utilization (NPU): The net protein utilization is the ratio of amino acid converted to proteins to the ratio of amino acids supplied. It is a measure of protein quality based on the percentage of ingested nitrogen that is retained by the body.

Preservative: Preservative is defined as any substance which is capable of retarding or arresting the process of deterioration of food.

Protein efficiency ratio (PER): Protein efficiency ratio (PER) is based on the weight gain of a test subject divided by its intake of a particular food protein during the test period.

Rancidity: *Rancidity* is a term generally used to denote unpleasant odors and flavors in foods resulting from deterioration in the fat or oil portion of a food. Types of *rancidity* include hydrolytic and oxidative *rancidity*. Hydrolytic *rancidity* is a condition caused by fat hydrolysis. Oxidative *rancidity* is caused by a biochemical reaction between fats and oxygen.

Water activity (a_w): Water activity is defined as the ratio of the vapor pressure of water in a material to the vapor pressure of pure water at the same temperature. Water activity (a_w) is expressed as:

$$a_w = \text{Vapor pressure of water in food} / \text{Vapor pressure of pure water at the same temperature}$$

Water holding capacity: The ability of muscle to hold fast its own water as well as added water.

