

The relationship between carbohydrate and protein digestion and metabolism and forage evaluation is discussed. The carbohydrate contents of several grasses and legumes are presented with their apparent digestibilities in the stomach and small intestine of sheep. In a section on the relation of nitrogenous components of forages to evaluation studies the VFA contents and protein solubility of several forages are presented. N loss from silage and N intake, digestibility, loss and retention in sheep from 12 forages are discussed. Procedures for evaluating forages, namely, chemical analyses, apparent digestibility, *in vivo* and *in vitro* digestibility, *in sacco* degradability in the rumen, solubility of protein, *in vitro* degradation of protein by rumen microbes, and N balance are reviewed.