

Non-Protein Nitrogen

Non-Protein Nitrogen (NPN) is measured, along with the nitrogen (N) contained in [true protein](#), by the procedure used to determine [Crude Protein](#) (CP). To fractionate CP, true protein is precipitated using either tungstic acid or trichloroacetic acid (TCA). Unprecipitated N (NPN) is measured using the [Kjeldahl procedure](#).

NPN, including compounds such as urea, ammonia salts, amino acids, small peptides and nucleotides, represents the crude protein fraction most rapidly degradable in the rumen.