Neutral Detergent Fibre

For the determination of Neutral Detergent Fibre (NDF), feed samples are boiled in a solution containing sodium lauryl sulphate. This detergent extracts lipids, sugars, organic acids and other water soluble components as well as pectin, non-protein nitrogen (NPN) compunds, soluble protein and some of the silica and tannin. NDF is the insoluble residue made up of cellulose, hemicellulose, lignin, lignin-bound nitrogen, some protein, minerals and cuticle. NDF % is the weight of the residue expressed as a percentage of the original sample.

Since it provides the most complete measure of cell wall components, NDF is used to balance fibre requirements in the formulation of dairy diets. The NRC (1989) publication 'Nutrient Requirements of Dairy Cattle' recommends that 75% of the total NDF requirement for lactating cows be provided as forage. Other schemes, including the Cornell Net Carbohydrate and Protein System, attempt to assign an *effective NDF* value to each feed, based on both its NDF content and its ability to provoke chewing and salivation.

for more information:

Understand Your Feed Analysis Report, *Alberta Dairy Management*