

Acid Detergent Fibre

For the determination of Acid Detergent Fibre (ADF), feed samples are boiled in a solution containing sulphuric acid and the detergent, cetyl trimethyl ammonium bromide. Hemicelluloses and cell wall proteins are dissolved, with the residue containing cellulose, lignin, lignified nitrogen, cutin, silica and some pectins. ADF % is simply the weight of the residue expressed as a percentage of the original sample.

It is generally assumed that the digestibility of a feed is inversely proportional to its ADF content and therefore, ADF is used to calculate [feed energy values](#). However, the relationship between ADF and digestibility is often poor, ADF usually accounting for less than 65% of the variance in digestibility ($r^2 < 0.65$). And in some case, particularly for 2nd cut forages, the relationship may be positive.

for more information:

[Understand Your Feed Analysis Report](#), *Alberta Dairy Management*