Crude Fat

Crude fat content is estimated by extracting a ground feed sample with diethyl ether. The ether soluble components (*ether extract*) may include true fats and oils, fatty acid esters, compound lipids and fat-soluble vitamins or provitamins such as the carotenoids, all of which may have nutritional value. However, ether extract may also contain significant concentrations of indigestible waxes, resins and essential oils.

The measurement of crude fat was an important part of the historical method of *proximate analysis* where it represented feed components with a caloric value 2.25 times that of carbohydrate or protein. Today it is used to estimate fat content of a feed for formulation of total dietary fat level and for calculation of non-fibre carbohydrate (NFC) by difference:

NFC = 100 - Crude Protein - Crude Fat - Neutral Detergent Fibre - Ash

for more information:

Facts about Fats, *Alberta Dairy Management*

Profitable Fat Feeding, *Alberta Dairy Management*