

Ash

Ash is the mineral residue remaining after a feed sample has been completely burned in a furnace heated to 500-600 °C. Although some volatile minerals (e.g. iodine and selenium) may be lost during heating, ash is a rough measure of the total mineral content of the sample.

Excessively high ash values (relative to normal values for a particular feed type) may indicate contamination with soil or mineral feeds such as limestone or salt. High and erroneous values can have a significant impact when rations are formulated for non-fibre carbohydrate (NFC), since NFC levels are calculated by subtracting ash and other feed fractions from total dry matter:

$$\text{NFC} = 100 - \text{Crude Protein} - \text{Crude Fat} - \text{Neutral Detergent Fibre} - \text{Ash}$$