

## NON STRUCTURAL CARBOHYDRATE (NSC) CONTENT IN US HORSE FEEDS

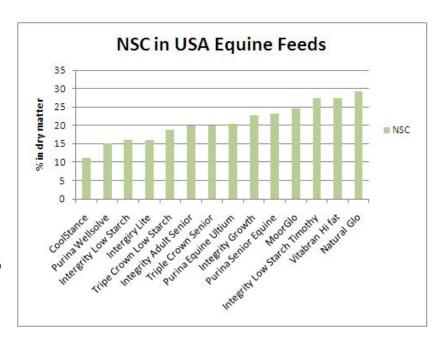
Non Structural Carbohydrate (NSC) is the measure of the sugar and starch content in the feed. A sample of feed is sent to an accredited laboratory such as Dairy One, and analysed for the various components.

NSC = Water soluble carbohydrate (WSC) + starch.

NSC gives a measure of the carbohydrate that can be digested to produce glucose. It is similar in concept to the measure of Glycemic Index (GI) in human foods.

## Why Measure NSC?

The incidence of metabolic disorders (laminitis, cushings, tying up, EMS, insulin resistance, colic) in modern horses has increased dramatically over the past 10 years. This increase is considered to result from overfeeding with highly digestible "fast foods" and not enough exercise. The measure of fast food is NSC. It is considered that for horses to maintain normal glucose metabolism, ie they remain sensitive to insulin, rather than becoming insulin resistant, then the total NSC content of the diet should be <12%



A range of commercially available horse feeds were submitted to Dairy One for NSC analysis.

CoolStance is a low NSC feed that provides a high level of digestible energy from non NSC sources (from digestible fibre and oil). CoolStance also contains MCT which are thought to preserve gut health.