



NQAC

Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Total Fructans by Modified AOAC 999.03

Method Number: LI-00.582

Scope of Application: Raw Materials and finished products such as milk powder, infant cereals, infant formula, and fructan ingredients.

Description: This method is based on the use of a commercial fructan kit available from Megazyme, Ireland. The sample is extracted with hot water. An aliquot of the extract is treated with specific enzymes, to remove the non-fructan sugars. Following fructan hydrolysis into fructose and glucose, it is measured using a colorimetric reaction with PAHBAH on a spectrophotometer. The total fructan amount of the sample is calculated by comparing the absorbance compared to a fructose standard solution. The result is corrected by using a correction factor "k" to convert fructose to anhydrofructose (and anhydroglucose) as occurs in fructan. An additional correction factor "f" takes into account the partial reduction of the reducing F_m-type fructans. This factor "f" is either assumed to be known for a given type of fructan ingredient, or can be directly determined by analyzing the raw fructan ingredient.

Sample Weight Required: 30 g

Method Reference: AOAC 999.03 – Measurement of Total Fructan in Foods

Analytical Platform: UV-Spectrophotometer

Special Information: Fructan ingredient information required upon submission

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Fructans		g/100 g	Solids : 0.5 Liquids : 0.1	10%