Development of a Rugged Sugar Method for Animal Feeds

Dan Berg

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AOAC Stakeholder / ERP Process

Stakeholder Panel on Strategic Food Analytical Methods (SPSFAM)

Launch of Sugar Analysis working group

Sunday September 24 8:30 am
Atlanta, GA
Dawn Frazier dfrazier@aoac.org

Funding from

- AAFCO
- AFIA
- General Mills
- Megazyme
- Thermo Fisher

Standard Method Performance Requirements (SMPRs) and Official Methods of Analysis (OMA) for Sugar Analysis – Mono and Di-Saccharides Timeline

- Summer 2017: AOAC will identify renowned subject matter experts to participate in the working group and a working group chair.
- September 2017: The working group chair will present a ‘launch presentation’ to the stakeholders.
- October 2017 to February 2018: The working group will meet by teleconferences to draft SMPRs.
- March 2018: The working group chair will present draft SMPRs for approval by SPSFAM.
- Call for Methods and Call for Experts.
- AOAC Expert Review Panel to review methods.
- A method(s) could be brought to the March 2018 meeting and get First Action approval, if ERP is formed in time

Covance method development

Internal Multi-lab validation and planned Publication

Infant formula NIST 1849a
Baby Food NIST 2383a
Cranberry Juice NIST 3282
High Sugar “artificial food stuff” BRC-644
Breakfast Cereal NIST 3233
Canned Tuna
Peanut Butter
Dry Cat Food
Wet Cat Food
Dry Dog Food
Horse Feed
Swine Feed
Milk replacer
Drink Dietary Supplement
Gummy Dietary Supplement
Tablet Dietary Supplement
Premix

IDF-ISO method on sugar analysis in dairy products

Work item accepted by IDF-ISO
Communication planned for J AOAC Int.

The Determination of Sugars in Dairy Products: the Development of a new Standard Method for International Dairy Federation (IDF) and Internal Organization for Standardization (ISO).1

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2) Rotating Disc BV, Spoorlaan 31, 9753 HV Haren, The Netherlands

Abstract

The set-up of a High Performance Anion Exchange Chromatographic Analysis with a pulsed Amperometric Detector (HPAEC-PAD) is described for the determination of mono- and disacharides is described. The method has been accepted by IDF-ISO as a New Work Item for the determination of sugars in dairy matrices. And at the moment the technical committee Milk and Milk Products of ISO/TC34/SC5is voting on the acceptance of this topic as a NEW Work Item “Milk and milk products – Determination of the sugar content – High performance anion exchange chromatographic method (HPAEC-PAD). The proposed method comprises an aqueous ethanol extraction of the sugars in the dairy sample followed by clarification with Carrez I and II reagents. The clarified filtrate will be diluted and then directly introduced in the HPAEC-PAD system for quantification of the sugars. A single lab validation of the proposed method has been scheduled for spring 2017.

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