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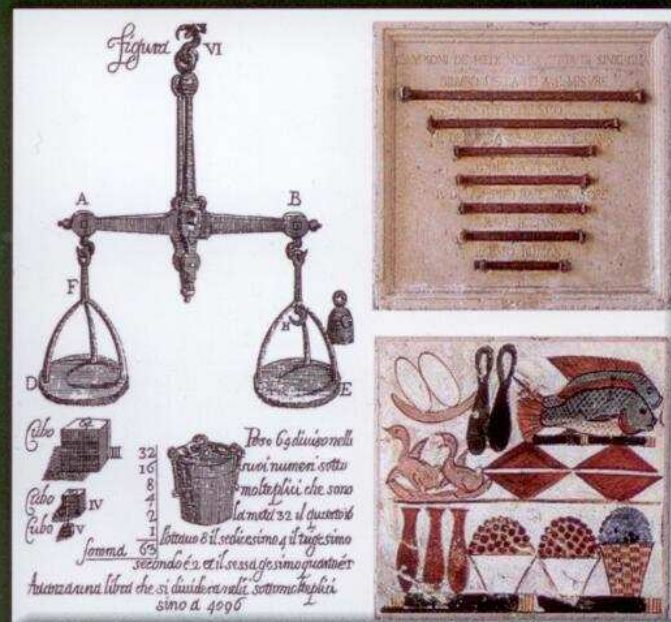
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Validation of methods for H, C, N and S stable isotopes and elemental analysis of cheese: results of an international collaborative study

Camin F.¹⁾, Bertoldi D.¹⁾, Santato A.¹⁾, Bontempo L.¹⁾, Ziller L.¹⁾, Stroppa A.²⁾, Larcher R.¹⁾

¹⁾Fondazione E. Mach (FEM), Via Mach 1, 38010 San Michele all'Adige (TN) ITALY – federica.camin@fmach.it

²⁾Consorzio Tutela Grana Padano, Via XXIV Giugno 8, 25010 San Martino Della Battaglia
Desenzano del Garda (BS) ITALY

The results of an international collaborative study performed according to the IUPAC and ISO protocols, are here presented. Aim of the study was to determine the performance characteristics of methods for isotopic (H, C, N and S stable isotope ratios) and elemental (Li, Na, Mn, Fe, Cu, Se, Rb, Sr, Mo, Ba, Re, Bi, U) analyses of cheese, currently used for establishing the authenticity of PDO cheeses. The average standard deviations of repeatability (sr) and reproducibility (sR) and the accuracy of both methods resulted satisfactory, if compared to the results of the same methods applied to other food matrices. The validation data obtained here can be submitted to the standardisation agencies to obtain official recognition for the methods, which is fundamental when they are used in commercial disputes and legal debates.