Determination of vitamin B1 in infant and follow-on formula by high performance liquid chromatography

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The purpose of this research is to establish an analysis method for the contents of vitamin B1 in infant and follow-on formula products. In this method, the sample preparation method required prior enzyme digestion with taka-diastase. A HPLC method was performed on Shiseido LC system (SP3213) coupled to fluorescence detector (FLD), with a UG120 (C18, 4.6 × 150 mm, 3 μm) column. Validation was performed using certified reference material (NIST SRM 1849a). Method performance parameters were estimated for linearity, limits of detection (LOD), quantification (LOQ), accuracy, repeatability and reproducibility. The proposed method was successfully applied for the determination of vitamin B1 in infant and follow-on formula and was found to be suitable for routine quality control monitoring.

Recent Publications


Biography

Kyungmi Hwang is currently a Scientific Officer of Nutrition and Functional Food Research team at the National Institute of Food and Drug Safety Evaluation, Republic of South Korea. Her research and development interests cover the areas of functional food and food chemistry. She has published more than 15 papers in reputed journals.

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