

Laboratory Performance Study VII (2002-3): Analysis of mandatory nutrients for nutrition labelling

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ABSTRACT

The objective of this study was to assess the performance of the analysis of mandatory nutrients for nutrition labelling. ASEANFOODS reference materials – AS-FRM5 (weaning food), commercial milk powder and full-fat soybean flour (for dietary fibre only) were used as test materials. The studied nutrients included total lipid, saturated fat, cholesterol, protein, dietary fibre, sugars, sodium, calcium, iron, vitamin A, B1, B2, C, ash and moisture. Number of participating laboratories for each test nutrient varied from the minimum of 7 (fatty acids) to the maximum of 28, depending on their routine facilities. Test materials were analysed by participants' routine methods. Evaluation of the submitted results was carried out using z-score. Laboratories with accepted, questionable and unsatisfied results for each nutrient were identified. The main discrepancies of submitted results were most similar to the last performance study in 2000, they were saturated fat, cholesterol, dietary fibre, sugars, and vitamin A. For many components, some possible causes of the discrepancies were discussed and presented. Corrective actions and collaborative activities among participating laboratories to improve and strengthen the quality of food analysis laboratories are encouraged.

Key word: laboratory performance study, mandatory nutrients for nutrition labelling.

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