Selective extraction and enrichment of 5-hydroymethylfurfural from honey, molasses, jam and vinegar samples prior to sensitive determination by micro-volume UV-vis spectrophotometry

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observed to be in range of 97.3-102.3 % and 2.5-3.8% (10, 25 and 75 mu g L-1, n: 5). After validation, the method was applied to the analysis of the selected foods. From the results, it was observed that 5-HMF levels were in the range of 1.05-18.10 mg kg(-1) with a RSD% of 3.0-4.2 % and recovery of 95.5-98.0 % by sample extraction with sonication while they ranged from 1.15-18.05 mg kg(-1) with a RSD% of 3.0-4.2 % and recovery of 95-99 % without sonication. Finally, it was observed that the results obtained were in agreements with those of the modified White method, statistically validating the method.

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