

Supporting Information

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Development of a densitometric HPTLC method for determination of 5-HMF in fruit-based baby foods in Turkey

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Table S1 : Brand codes and number of products

Brand codes	Number of products
A	9 (15.5%)
B	1 (1.72%)
C	5 (8.6%)
D	24 (41.38%)
E	1 (1.72%)
F	13 (22.4%)
G	5 (8.6%)
Total product number	58 (100%)

Table S2: Results of robustness parameters of the proposed method

Concentrations (n=5)	Scan Speed (mm/s)		Relative Humidity%	
	5	20	36.2	38.4
25 ng/spot	21.8	23.5	23.2	19.9
250 ng/spot	223.2	240.7	239.5	218.0

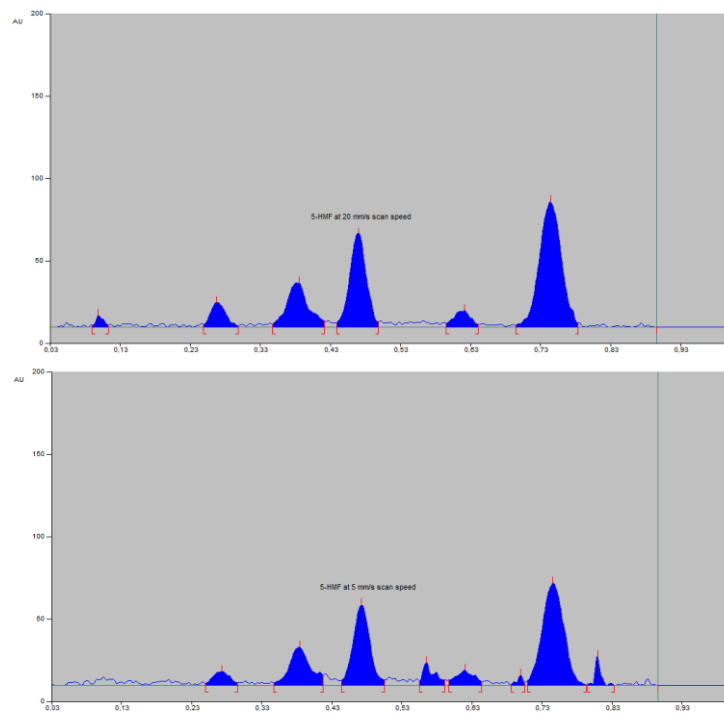


Figure S1: Comparison of chromatographic conditions for the analysis of 5-HMF at two scan speeds (5 and 20 mm/s) by HPTLC.

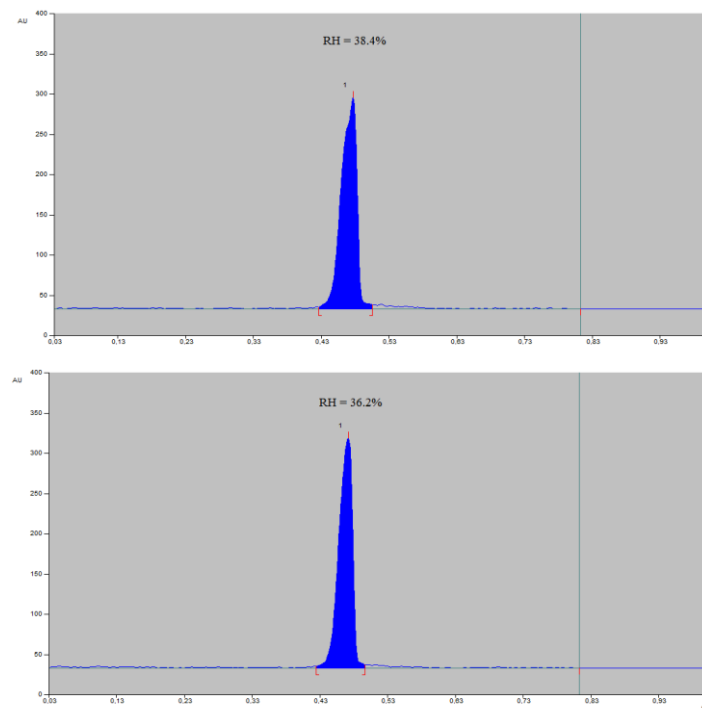


Figure S2: Comparison of chromatographic conditions for the analysis of 5-HMF at two relative humidity (RH) levels (38.4% and 36.2%) by HPTLC.

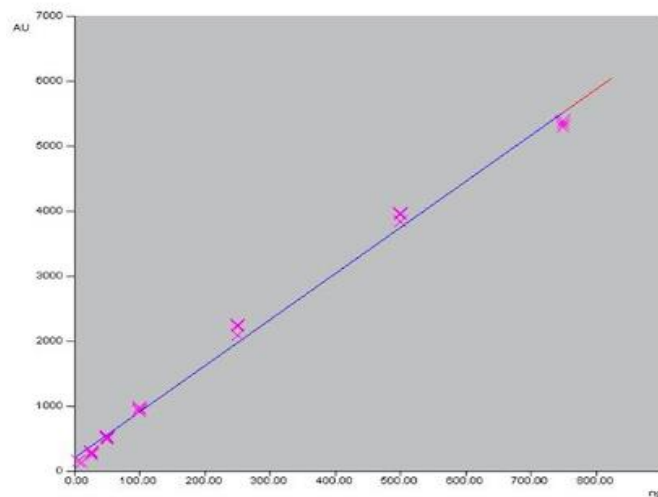


Figure S3 : Calibration graph for estimation of 5-HMF in baby food matrix.

Table S3: Validation results of 5-HMF with the proposed method.

<i>Validation parameters</i>	
Linearity range [ng/spot]	10-750
Regression equation	$y = 7.084x + 209.826$
Correlation coefficient (r ²)	0.99703
LOD [ng/g]	1.54 ng/spot
LOQ [ng/g]	4.67 ng/spot
Recovery*	
± RSD [%] (n = 6)	83.65 ± 2.0% (25 ng/spot)
	96.02 ± 3.0% (250 ng/spot)

*RSD% for recovery data of acidified QuEChERS method were set only at two concentrations (25 and 250 ng/spot).