

Banana flour flavonoids dramatically inhibit transepithelial glucose transport in wheat cakes using an *in vitro* digestion/Caco-2 intestinal model

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Supplementary material 1. Crumb structure of wheat cake (control sample) and banana flour-enriched wheat cakes. From the left to the right, F cake (freeze-dried banana flour), D cake (oven dried banana flour), FE cake (freeze-dried and extruded banana flour), DE cake (oven dried and extruded banana flour) and wheat cake (control).



Supplementary material 2. Phenolic compounds quantified in banana flours (D, oven-dried; F, freeze-dried; DE, oven-dried and extruded; FE, freeze-dried and extruded), including the m/z ions employed for their quantification. Results are given in mg/100 g. The total content of dietary fiber of banana flours, in g/100 g, as well as the total content of extractable phenolics (EPP) and hydrolyzable phenolics (HPP), in mg/100g, are also included. This data was published in Pico et al. (2019).

	m/z	D	F	DE	FE
Vanillic acid	167.00	nd	nd	nd	nd
Gallic acid	169.20	0.008 a ± 0.002	0.017 a ± 0.002	0.657 b ± 0.056	0.669 b ± 0.100
Caffeic acid	179.06	0.072 b ± 0.007	0.044 a ± 0.007	0.095 b ± 0.013	0.176 c ± 0.024
Ferulic acid^a	193.02	nd	nd	nd	nd
Chlorogenic acid^a	353.31	nd	nd	nd	nd
Epicatechin	289.30	1.696 c ± 0.170	1.933 d ± 0.127	0.346 a ± 0.015	1.134 b ± 0.071
Catechin	289.07	0.003 a ± 0.001	nd	0.036 c ± 0.002	0.017 b ± 0.003
Quercetin^b	301.00	<LOQ	<LOQ	<LOQ	<LOQ
Quercetin 3-glucoside	463.00	0.029 c ± 0.004	0.016 b ± 0.003	0.003 a ± 0.000	0.007 a ± 0.001
Myricetin	317.00	0.093 b ± 0.010	0.010 a ± 0.002	0.246 c ± 0.034	0.283 c ± 0.015
Total content EPP		337.79 a ± 9.79	335.66 a ± 9.79	1195.97 c ± 14.28	515.82 b ± 2.65
Total content HPP		1061.22 a ± 2.53	1082.9 a ± 6.52	1124.63 b ± 8.01	1175.87 c ± 17.42
Total dietary fiber		33.3 c ± 6.6	48.0 d ± 4.3	10.1 a ± 0.1	15.7 b ± 0.4

Values followed by the same letters within each compound indicate no significant differences ($p > 0.05$).

^a nd means “not detectable”.

^b <LOQ means “under the limits of detection”.