

SUPPLEMENTARY DATA

Beta-glucan and phenolic compounds: Their concentration in barley based food products and their behaviour during in-vitro gastrointestinal digestion and colonic fermentation

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- includes supplementary information on digestion losses of intestinal residue during in-vitro gastrointestinal digestion (**Table S1**), as well as short chain fatty acid (SCFA) (**Table S2**) and phenolic compounds (PCs) (**Table S3**) composition of in-vitro fermented cookies, crackers and fresh pasta.

Table S1. Short Chain Fatty Acid (SCFA) Composition of In-vitro Fermented Cookies, Crackers and Fresh Pasta. Data are expressed as g/100 g Dry Weight product (Mean ± SD, n=3).

	Cracker				Cookies				Fresh pasta			
	2h	6h	24h	48h	2h	6h	24h	48h	2h	6h	24h	48h
Butyric acid	0.08 ± 0.01	0.00 ± 0.00	0.10 ±0.01	0.20 ± 0.01	0.08 ± 0.01	0.00 ± 0.00	0.20 ± 0.1	0.20 ± 0.1	0.09 ± 0.01	0.12 ± 0.00	0.04 ± 0.00	0.00 ± 0.00
Acetic acid	0.00 ± 0.00	0.38 ± 0.05	2.70 ± 0.15	2.96 ± 0.18	0.00 ± 0.00	0.25 ± 0.01	1.52 ± 0.14	1.69 ± 0.05	0.00 ± 0.00	0.18 ± 0.02	1.30 ± 0.07	1.88 ± 0.03
Propionic acid	0.00 ± 0.00	0.12 ±0.02	1.40 ± 0.06	1.60 ± 0.15	0.00 ± 0.00	0.00 ± 0.00	0.88 ± 0.08	1.40 ± 0.04	0.00 ± 0.00	0.08 ± 0.09	0.90 ± 0.03	2.05 ± 0.07
Total	0.08 ± 0.01	0.50 ± 0.08	4.20 ± 0.20	4.76 ± 0.30	0.08 ± 0.01	0.25 ± 0.01	2.60 ± 0.20	3.29 ± 0.10	0.09 ± 0.01	0.38 ± 0.10	2.24 ± 0.10	3.93 ± 0.09

Table S2 Dry weight of product, intestinal supernatant, intestinal residues and digestion loss correction factor for the correction of the apparent increase of beta glucan in intestinal residue

	Dry weight product	Dry weight intestinal supernatant ^a	Dry weight intestinal residue	Digestion loss correction factor ^b	β-glucan intestinal supernatant	β-glucan intestinal residue
Cookies	5.04 ± 0.02	3.96 ± 0.02 (1.34 ± 0.05)	2.33 ± 0.11	2.09	1.19 ± 0.08	0.73 ± 0.05
Cracker	4.59 ± 0.06	4.20 ± 0.17 (1.39 ± 0.14)	1.79 ± 0.19	2.57	0.47 ± 0.06	1.37 ± 0.20
Fresh Pasta	1.72 ± 0.04	2.75 ± 0.05 (167 ± 0.06)	0.45 ± 0.09	2.67	0.74 ± 0.05	1.83 ± 0.04

^a Figures in parenthesis correspond to the dry weight of the enzymes and salts added during in-vitro digestion

^b the correction factor is the quotient between dry weight of the residue and dry weight of the product.

