

Sorghum (*Sorghum bicolor* L. Moench) Gluten-Free Bread: the Effect of Milling Conditions on the Technological Properties and *In Vitro* Bioaccessibility of Polyphenols and Minerals

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Table S1. Particle size distribution parameters of sorghum flour

Sample	D 10 (μm)	D 50 (μm)	D90 (μm)	Av (D4,3) (μm)	Span
WWS-IM	30.3 ^a	437.8 ^a	786.6 ^a	431.6 ^a	1.9 ^b
PWS-IM	187.6 ^b	564.7 ^a	883.6 ^b	561.6 ^b	1.2 ^a
WS-RM	156.3 ^b	456.7 ^a	777.8 ^a	468.7 ^{ab}	1.4 ^a

Values are expressed as mean (n = 3). Different letters in the same column express significant differences (p<0.05). WWS: whole white sorghum flour; PWS: polished white sorghum flour; IM: impact milling; RM: roller milling. D4.3: volume mean diameter; D10, D50, D90: diameters where 10%, 50%, and 90% of the particle population are below these values, respectively. Span: polydispersity index.

Table S2. Polyphenolic compounds identified in sorghum flour and bread

Nº	Tr (min)	Tentative ID	Molecular formula	[M-H]- experimental (m/z)	[M-H]- calculated (m/z)	Fragments MS/MS (m/z)
1	12.1	Dicaffeoyl spermidine I	C ₂₅ H ₃₀ N ₃ O ₆	468.2107	468.2140	332, 306
2	12.5	Dicaffeoyl spermidine II	C ₂₅ H ₃₀ N ₃ O ₆	468.2210	468.2140	332, 306
3	12.7	Caffeoyl feruloyl spermidine	C ₂₆ H ₃₃ N ₃ O ₆	482.2274	482.2297	332, 306
4	14.1	2-O caffeoyl glycerol	C ₁₂ H ₁₃ O ₆	253.0736	253.0718	179, 161
5	15.3	Caffeic acid	C ₉ H ₇ O ₄	179.0331	179.0350	
6	16.8	Coumaroyl glycerol	C ₁₂ H ₁₃ O ₅	237.0778	237.0768	
7	22.7	Dicaffeoyl glycerol	C ₂₁ H ₁₉ O ₉	415.1058	415.1032	253, 179, 161
8	24.4	Coumaroyl caffeoyl glycerol	C ₂₁ H ₂₀ O ₈	399.1080	399.1085	253, 179, 235
9	24.6	Feruloyl caffeoyl glycerol	C ₂₂ H ₂₁ O ₉	429.1174	429.1191	193, 235
10	25.4	Naringenin	C ₁₅ H ₁₂ O ₅	271.0590	271.0612	151, 177
11	26.1	Luteolin	C ₁₅ H ₁₀ O ₆	285.0379	285.0405	
12	26.5	Coumaroyl-feruloyl-glycerol	C ₂₂ H ₂₂ O ₈	413.1208	413.1242	193, 285
13	29.1	Apigenin	C ₁₅ H ₉ O ₅	269.0435	269.0455	225
14	29.5	Hispidulin	C ₁₆ H ₁₂ O ₆	299.0563	299.0561	284
15	31.4	Tri-hydroxy-octadecenoic acid	C ₁₈ H ₃₃ O ₅	329.2315	329.2333	211, 229

Tr: retention time