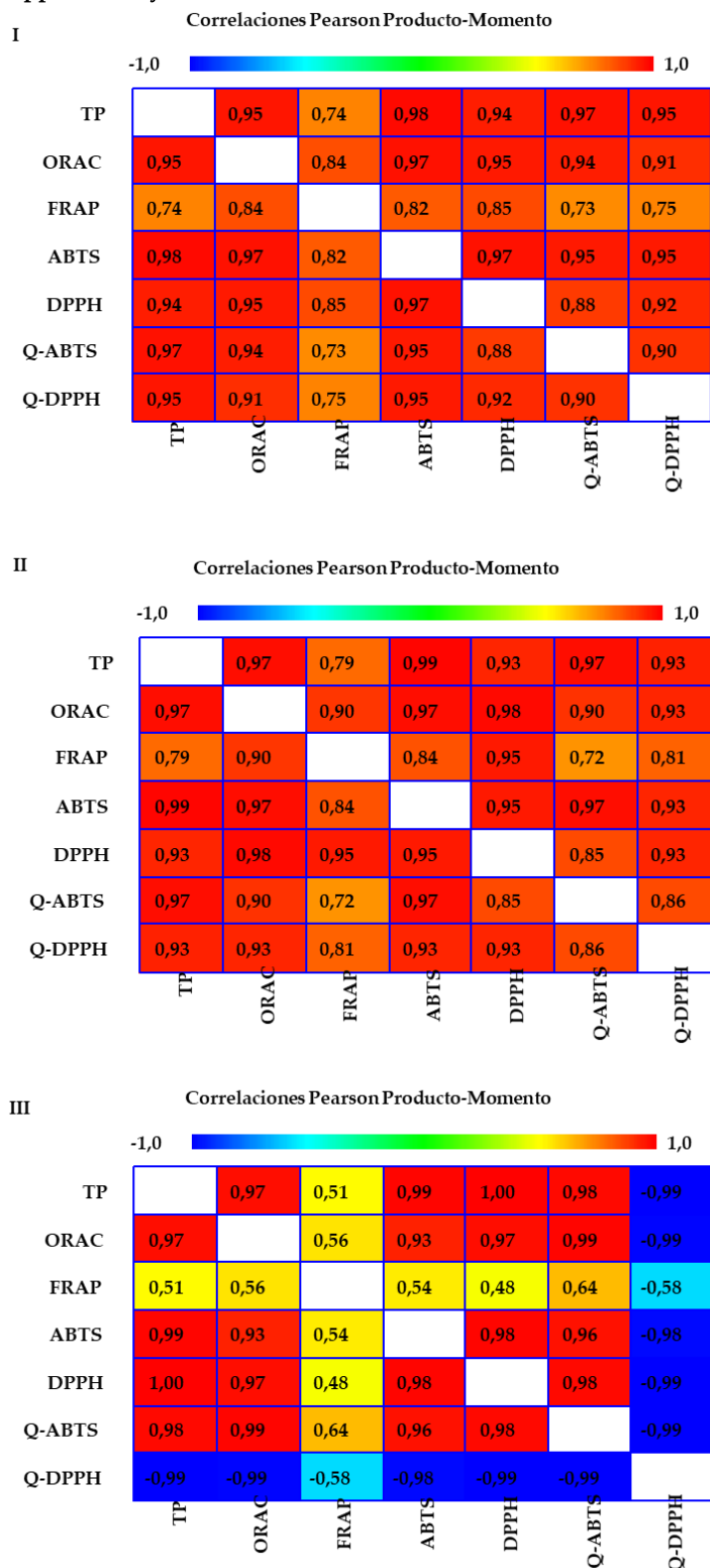
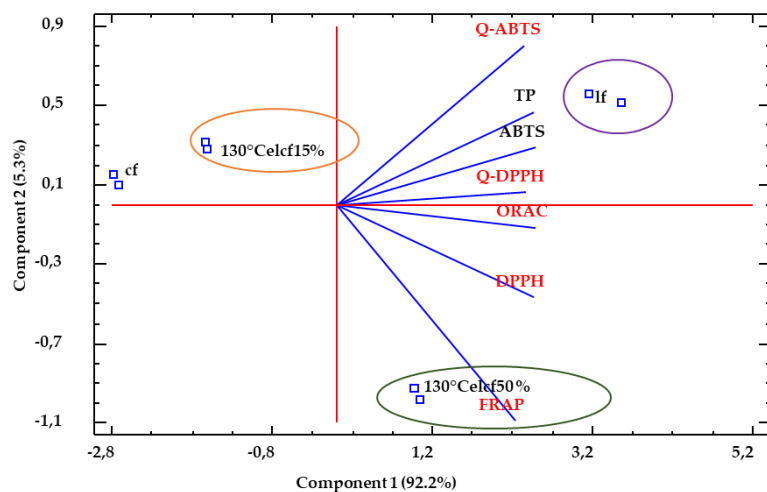


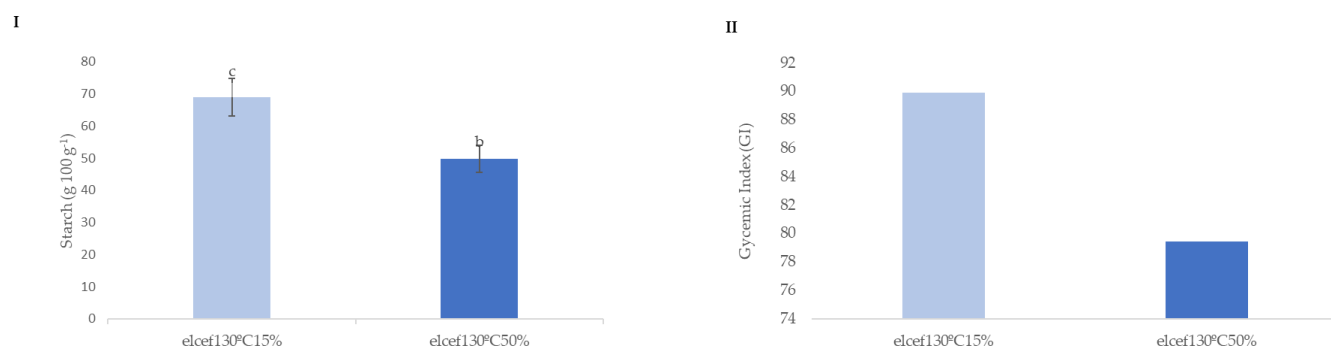
## Supplementary Materials



**Supplementary Figure S1.** Pearson's correlation analysis. (I) Data set of samples: native corn, rice and lentil flours, and extruded corn, rice, lentil (50%)-corn and lentil (50%)-rice flours. (II) Data set of samples: 130°C-extruded lentil (15%)-corn and lentil (50%)-corn flours. (III) Data set of samples: 130°C-extruded lentil (15%)-corn flour and baked product.



**Supplementary Figure S2.** PCA analysis for native and 130 °C-extruded flours. Abbreviations: cf: corn flour; lf: lentil flour; 130°Celcf15%: extruded lentil (15%)-corn flour; 130°Celcf50%: extruded lentil (50%)-corn flour.



**Supplementary Figure S3.** Starch content (g 100g<sup>-1</sup> of dry matter) (I) and Glycemic index (GI) of 130 °C-extruded flours (II). Abbreviations: cf: corn flour; lf: lentil flour; 130°Celcf15%: extruded lentil (15%)-corn flour; 130°Celcf50%: extruded lentil (50%)-corn flour. Different small letters indicate significant differences ( $p \leq 0.05$ ) between samples.

**Supplementary Table S1.** RACI of native and extruded flours. Abbreviations: cf: corn flour; rf: rice flour; lf: lentil flour; ecf: extruded corn flour; erf: extruded rice flour; elcf: extruded lentil-corn flour; elrf: extruded lentil-rice flour.

FLOURS	RACI
cf	-0.56864807
lf	2.43125276
rf	-0.8226027
110°Cecf	-0.82883367
120°Cecf	-0.79126188
130°Cecf	-0.55167058
110°Cerf	-0.85429132
120°Cerf	-0.85760928
130°Cerf	-0.6030281
110°Celcf50%	0.15663327
120°Celcf50%	0.04827246
130°Celcf50%	1.25805807
110°Celrf50%	0.00855723
120°Celrf50%	0.08211183
130°Celrf50%	1.0468099
130°Celcf15%	-0.61092303

**Supplementary Table S2.** Colorimetric parameters (CIE L\* a\* b\*, Hue and Chroma) of lentil (balanced with corn) flour extruded at 130°C.

Sample	L*	a*	b*	Hue	Chroma
130°Celcf15%	76.39 ± 5.27 <sup>b</sup>	3.52 ± 1.21 <sup>a</sup>	21.97 ± 4.10 <sup>b</sup>	1.42 ± 0.04 <sup>a</sup>	22.25 ± 4.22 <sup>b</sup>
130°Celcf50%	46.30 ± 14.78 <sup>a</sup>	2.38 ± 0.78 <sup>a</sup>	14.66 ± 5.05 <sup>a</sup>	1.41 ± 0.02 <sup>a</sup>	14.86 ± 5.11 <sup>a</sup>

\*Abbreviations: 130°Celcf15%: 15% lentil, 130°Celcf50%: 50% lentil. Different small letters in the same column indicate significant differences ( $p \leq 0.05$ ) between samples.