

Supplementary data

Table S1. Two-way ANOVA analysis values of percentage of digestibility of *Amaranthus cruentus* and *Chenopodium pallidicaule* proteins, considering the effect of the Food matrix and digestion time.

	df	F
Food Matrix	1	186.31*
Digestion Time	8	409.23**
Food matrix x Digestion Time	8	13.84*
Error	36	

Values with asterisks represent * $p < 0.01$, ** $p < 0.001$

Table S2. Two-way ANOVA analysis values of effect of *in vitro* gastrointestinal digestion on amino acid profile (mg g⁻¹ protein) of *Amaranthus cruentus* (A) and *Chenopodium pallidicaule* (B) proteins considering the effect of the Food Matrix and Digestion phase.

A	df	F
Amino acids	16	2687.4**
Digestion phase	1	108209.4**
Amino acids x Digestion phase	16	2071.3**
Error	68	

B	df	F
Amino acids	16	7396.3**
Digestion phase	1	290259.1**
Amino acids x	16	6168.9**
Error	68	

Values with asterisks represent ** $p < 0.001$

Table S3. Two-way ANOVA analysis values of antioxidant activity by ORAC, ABTS and DPPH assays, considering the effect of the Food matrix and digestion phase.

		ORAC	ABTS	DPPH
	df	<i>F</i>	<i>F</i>	<i>F</i>
Food matrix	2	530.57**	6.42*	171.9**
Digestion phase	1	75.2**	3204.2**	131.8**
Food matrix x Digested	2	22.44**	4.5*	32.9**
Error	12			

Values with asterisks represent * $p < 0.01$, ** $p < 0.001$

Table S4. Source of variation of the three-way ANOVA model for cellular antioxidant activity in HepG2 (A) and Caco-2 cells (B) comparing the three factors: Food matrix, Sample and Concentration, and their respective interactions.

A	Source of variation	df	<i>F</i>	<i>p</i>	Post hoc
	Food matrix	1	7.214	0.01	A = C
	Concentration	1	734.422	0.001	0.750 > 0.250
	Sample	5	324.828	0.001	U, G<5, G>5, I<5, I>5 > C
	Food Matrix x Concentration	1	2.850	0.097	
	Food Matrix x Sample	5	4.983	0.001	
	Concentration x Sample	5	40.720	0.0	NS
	Food matrix x Concentration x Sample	5	0.656	0.656	
	Error	48			

B	Source of variation	df	<i>F</i>	<i>p</i>	Post hoc
	Food Matrix	1	0.030	0.862	A = C
	Sample	5	445.609	0.001	U, G<5, G>5, I<5, I>5 > C
	Concentration	1	3948.590	0.001	0.750 > 0.250
	Food Matrix x Sample	5	3.876	0.004	
	Food Matrix x Concentration	1	0.024	0.877	
	Sample x Concentration	5	183.094	0.0	NS
	Food Matrix x Sample x Concentration	5	3.906	0.004	
	Error	48			

NS= not significant