

Table S1. Composition of carotenoids and tocots (mean \pm standard deviation; mg/kg DM) in pasta prepared with rice and faba bean flours (Control) or enriched with different percentages of tomato waste (TP) or linseed meal (LI).

	Control	10% TP	15% TP	10% LI	15% LI
<i>Carotenoids</i>					
Lycopene + β -carotene	0.09 ^c \pm 0.03	0.48 ^b \pm 0.01	0.61 ^a \pm 0.03	0.06 ^c \pm 0.01	0.06 ^c \pm 0.00
β -cryptoxanthin	0.06 \pm 0.01	0.05 \pm 0.00	0.06 \pm 0.01	0.05 \pm 0.01	0.05 \pm 0.00
Lutein	0.93 ^a \pm 0.01	0.65 ^b \pm 0.03	0.68 ^b \pm 0.02	0.80 ^{ab} \pm 0.12	0.76 ^b \pm 0.03
Zeaxanthin	0.09 \pm 0.00	0.04 \pm 0.01	0.06 \pm 0.01	0.12 \pm 0.11	0.04 \pm 0.00
<i>Tocols</i>					
α -tocopherol	nd	0.34 \pm 0.32	0.94 \pm 0.02	nd	nd
β -tocopherol	nd	0.39 \pm 0.25	0.50 \pm 0.05	nd	nd
β -tocotrienol	nd	nd	nd	4.93 ^b \pm 0.25	8.35 ^a \pm 0.47
γ -tocopherol	6.55 ^c \pm 0.20	7.22 ^c \pm 0.59	10.27 ^a \pm 0.47	7.40 ^c \pm 0.23	8.81 ^b \pm 0.61
γ -tocotrienol	0.85 \pm 0.01	0.70 \pm 0.14	0.55 \pm 0.14	0.82 \pm 0.04	0.70 \pm 0.11
δ -tocotrienol	nd	0.48 \pm 0.12	0.55 \pm 0.08	nd	nd

nd, lower than the detection limit.

Table S2. Composition (mean \pm standard deviation) of soluble free and insoluble bound polyphenols; mg/kg DM) in pasta prepared with rice and fava bean flours (Control) or enriched with different percentages of tomato waste (TP) or linseed meal (LI).

	Control	10% TP	15% TP	10% LI	15% LI
Soluble free phenolics					
<i>Phenolic acids</i>					
Protocatechuic	15.94 \pm 0.89	19.35 \pm 2.03	19.36 \pm 1.97	15.52 \pm 0.28	18.69 \pm 0.57
4-hydroxybenzoic	0.54 ^c \pm 0.03	1.21 ^b \pm 0.08	1.80 ^a \pm 0.31	1.58 ^{ab} \pm 0.38	1.19 ^b \pm 0.03
Syringic	1.77 ^d \pm 0.33	6.65 ^b \pm 0.33	11.73 ^a \pm 0.13	2.17 ^{cd} \pm 0.10	2.48 ^c \pm 0.07
p-coumaric	0.16 \pm 0.01	0.15 \pm 0.05	0.21 \pm 0.09	nd	nd
Ferulic	0.96 ^b \pm 0.15	1.69 ^a \pm 0.09	2.19 ^a \pm 0.23	nd	nd
<i>Flavonoids</i>					
Catechin	30.5 ^c \pm 1.1	45.7 ^b \pm 0.1	44.7 ^b \pm 0.2	48.9 ^a \pm 0.8	49.8 ^a \pm 1.7
Epicatechin	2.28 \pm 0.24	1.90 \pm 0.10	1.78 \pm 0.36	2.05 \pm 0.28	2.44 \pm 0.20
Rutin	nd	0.66 ^b \pm 0.04	3.74 ^a \pm 0.44	nd	nd
Quercetin	nd	1.08 ^b \pm 0.02	1.40 ^a \pm 0.04	nd	nd
Naringenin	nd	5.83 ^b \pm 0.12	10.46 ^a \pm 0.48	nd	nd
Tyrosol	5.96 ^c \pm 0.77	17.24 ^b \pm 1.68	26.05 ^a \pm 2.36	28.58 ^a \pm 1.16	29.23 ^a \pm 1.75
Insoluble bound					
<i>Phenolic acids</i>					
Protocatechuic	1.78 ^c \pm 0.31	2.38 ^c \pm 0.54	2.65 ^c \pm 0.38	23.26 ^b \pm 0.41	38.04 ^a \pm 0.06
4-hydroxybenzoic	1.86 ^c \pm 0.08	5.16 ^a \pm 0.91	6.34 ^a \pm 0.10	2.95 ^{bc} \pm 1.56	4.41 ^{ab} \pm 0.12
Caffeic	0.17 ^b \pm 0.14	0.87 ^b \pm 0.08	2.20 ^a \pm 0.88	0.65 ^b \pm 0.31	1.08 ^b \pm 0.02
p-coumaric	0.57 ^d \pm 0.06	1.11 ^{bc} \pm 0.02	1.67 ^a \pm 0.16	0.87 ^{cd} \pm 0.43	1.47 ^{ab} \pm 0.00
Sinapic	0.06 ^c \pm 0.04	0.28 ^{bc} \pm 0.12	0.42 ^{bc} \pm 0.18	0.79 ^b \pm 0.56	1.92 ^a \pm 0.02
Ferulic	91.4 ^c \pm 1.7	67.7 ^d \pm 1.3	67.1 ^d \pm 0.5	102.3 ^b \pm 1.4	115.4 ^a \pm 0.3
Cinnamic derivative	0.62 ^c \pm 0.04	4.69 ^b \pm 0.34	6.89 ^a \pm 0.36	0.94 ^c \pm 0.03	0.67 ^c \pm 0.04
<i>Flavonoids</i>					
Epicatechin	1.07 ^c \pm 0.01	1.89 ^b \pm 0.63	4.16 ^a \pm 0.29	2.45 ^b \pm 0.09	4.74 ^a \pm 0.13
Quercetin	1.05 ^c \pm 0.17	9.87 ^b \pm 0.78	17.12 ^a \pm 2.00	1.77 ^c \pm 0.08	0.58 ^c \pm 0.05
Naringenin	0.10 ^c \pm 0.09	12.53 ^b \pm 1.07	22.32 ^a \pm 2.17	2.01 ^c \pm 0.70	0.34 ^c \pm 0.04
<i>Stilbenes</i>					
Resveratrol derivative	2.80 \pm 0.06	2.18 \pm 0.02	2.35 \pm 0.01	2.35 \pm 0.50	2.41 \pm 0.00
Resveratrol	4.27 \pm 0.25	3.31 \pm 0.13	3.43 \pm 0.03	4.23 \pm 0.27	4.62 \pm 0.08

nd, lower than the detection limit.

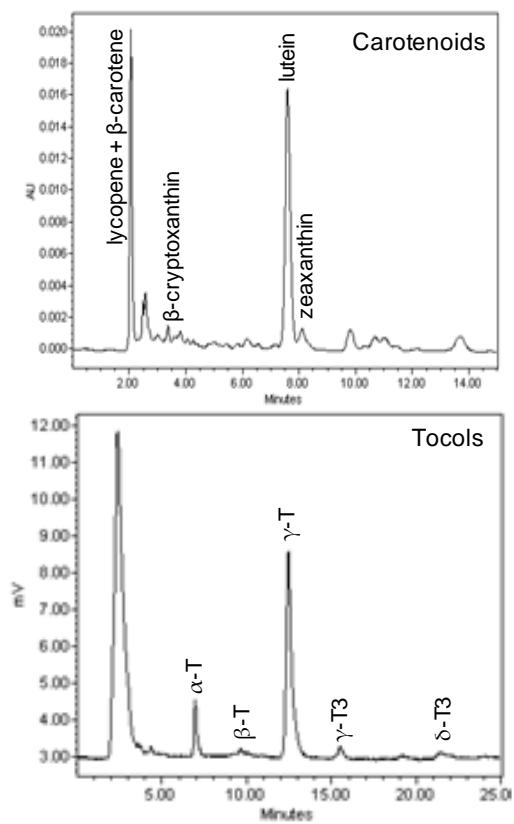


Figure S1. HPLC chromatograms of carotenoids and tocopherols in the pasta sample enriched with 15% of tomato pomace. T, tocopherol; T3, tocotrienol.

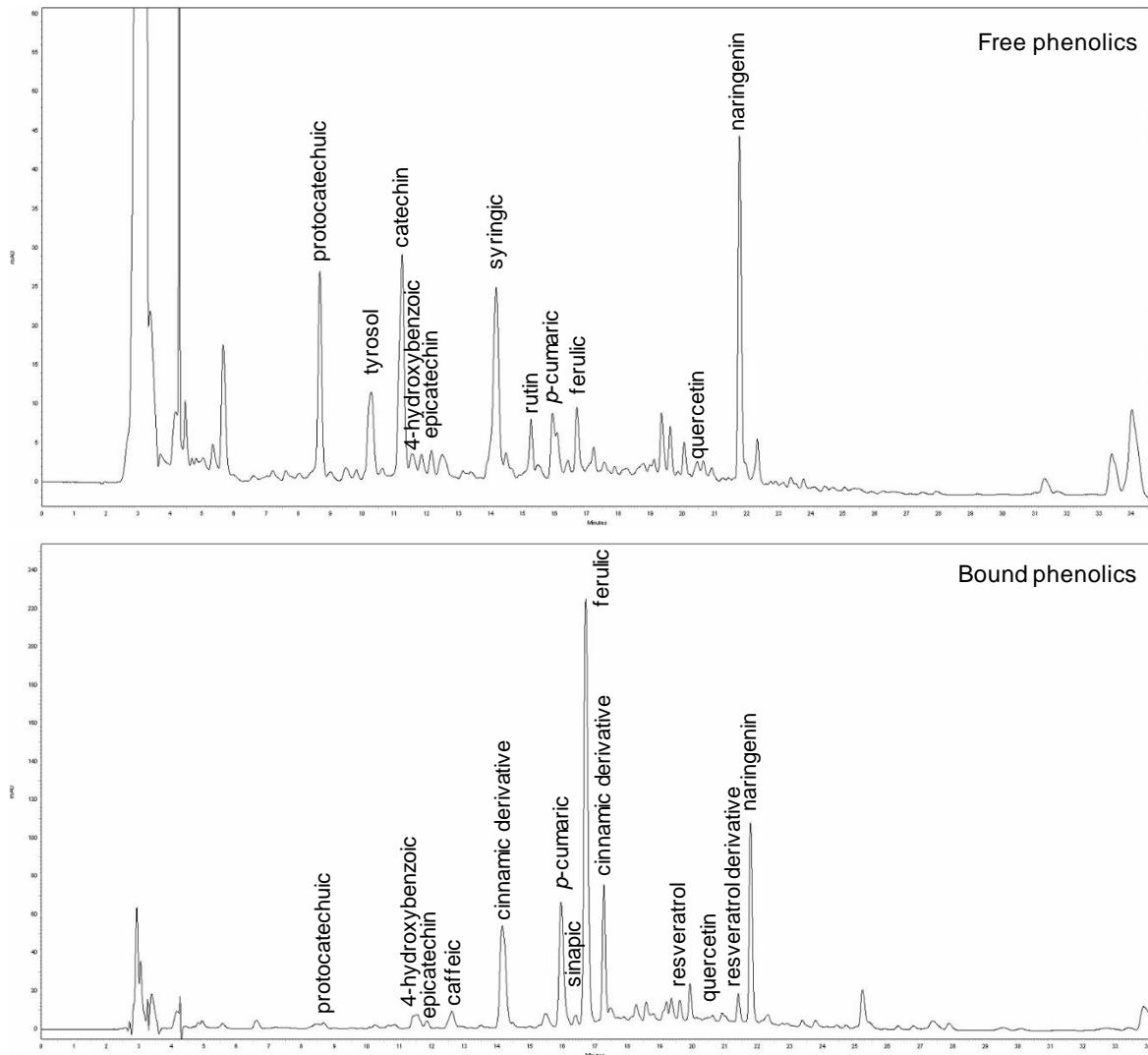


Figure S2. HPLC chromatograms at 280 nm of the free and bound phenolics in the pasta sample enriched with 15% of tomato pomace. Caffeic, sinapic and resveratrol are read at 320 nm while rutin and quercetin at 360 nm.