

Supplementary Data

Table 3S. Time-course concentrations of the phenolic metabolites found in plasma after oral gavage of rice bran enzymatic extract.

Phenolic metabolites ($\mu\text{mol/L}$ plasma)	Time after RBEE oral administration								
	0 h	15 min	30 min	1 h	3 h	6 h	12 h	18 h	24 h
Ferulic acid	n.d. ^d	1.26±0.28 ^a	1.56±0.35 ^a	0.57±0.08 ^b	0.38±0.07 ^{bc}	0.08±0.01 ^{cd}	0.45±0.05 ^b	0.00±0.0 ^d	n.d. ^d
Isoferulic acid	n.d. ^b	0.05±0.03 ^b	0.25±0.19 ^a	0.01±0.00 ^b	0.00±0.00 ^b	0.00±0.00 ^b	0.03±0.01 ^b	n.d. ^b	n.d. ^b
Dihydroferulic acid	n.d. ^b	0.03±0.02 ^b	0.05±0.02 ^b	0.01±0.00 ^b	0.00±0.00 ^b	0.19±0.07 ^a	0.01±0.01 ^b	n.d. ^b	n.d. ^b
Ferulic acid sulphate	n.d. ^c	9.61±1.11 ^a	12.49±3.95 ^a	6.00±0.70 ^b	5.57±0.58 ^b	1.27±0.13 ^c	4.67±0.18 ^b	0.04±0.02 ^c	n.d. ^c
Ferulic acid glucuronide	n.d. ^c	0.37±0.06 ^b	0.73±0.23 ^a	0.29±0.03 ^b	0.29±0.03 ^b	0.07±0.01 ^c	0.29±0.03 ^b	n.d. ^c	n.d. ^c
Dihydroferulic acid sulphate	n.d. ^e	0.69±0.13 ^{bc}	0.84±0.29 ^b	0.33±0.06 ^{cd}	0.48±0.16 ^{cd}	1.32±0.36 ^a	0.30±0.03 ^{de}	0.02±0.01 ^e	n.d. ^e
<i>p</i> -coumaric acid	n.d. ^d	1.56±0.48 ^b	2.25±0.68 ^a	0.96±0.12 ^c	0.45±0.04 ^{cd}	0.04±0.01 ^d	0.48±0.08 ^{cd}	0.00±0.00 ^d	n.d. ^d
Coumaric acid sulphate	0.02±0.01 ^c	2.92±0.41 ^a	3.54±0.92 ^a	1.40±0.17 ^b	1.24±0.11 ^b	0.28±0.02 ^c	1.24±0.06 ^b	0.02±0.00 ^c	0.01±0.00 ^c
Coumaric acid glucuronide	n.d. ^d	0.02±0.00 ^b	0.05±0.01 ^a	0.01±0.00 ^c	0.01±0.00 ^c	0.00±0.00 ^d	0.01±0.00 ^c	n.d. ^d	n.d. ^d
Hydroxyphenylacetic acid	0.75±0.24 ^c	1.81±0.47 ^a	1.70±0.35 ^{ab}	0.66±0.05 ^c	0.78±0.13 ^c	1.32±0.17 ^b	0.67±0.09 ^c	0.46±0.04 ^c	0.50±0.08 ^c
Hydroxyphenylacetic acid glucuronide	n.d. ^c	0.99±0.28 ^b	1.39±0.62 ^a	0.47±0.22 ^c	0.00±0.00 ^c	n.d. ^c	n.d. ^c	n.d. ^c	n.d. ^c
Dihydroxyphenylacetic acid sulphate	0.62±0.38 ^d	111.8±16.3 ^{ab}	125.7±38.1 ^a	92.45±16.2 ^b	59.27±5.57 ^c	19.03±2.70 ^d	53.65±2.58 ^c	1.71±0.28 ^d	1.44±0.21 ^d
Dihydroxyphenylacetic acid glucuronide	n.d. ^c	1.66±0.18 ^b	2.51±0.73 ^a	1.20±0.16 ^b	0.82±0.22 ^b	0.64±0.17 ^b	0.82±0.21 ^b	n.d. ^c	n.d. ^c
Hydroxyphenylpropionic acid sulphate	0.03±0.02 ^d	1.76±0.45 ^c	2.85±0.89 ^b	1.80±0.51 ^c	3.60±0.55 ^b	5.22±0.78 ^a	2.64±0.26 ^{bc}	0.00±0.00 ^d	n.d. ^d
Dihydroxyphenylpropionic acid glucuronide	n.d. ^d	0.08±0.00 ^b	0.10±0.01 ^a	0.07±0.00 ^{bc}	0.06±0.00 ^c	0.06±0.02 ^c	0.07±0.00 ^{bc}	n.d. ^d	n.d. ^d
<i>p</i> -hydroxybenzoic acid	n.d. ^d	0.33±0.09 ^b	0.58±0.17 ^a	0.23±0.03 ^b	0.10±0.01 ^{bc}	0.11±0.03 ^{bc}	0.16±0.04 ^b	n.d. ^{cd}	n.d. ^{cd}
Hydroxybenzoic acid	n.d. ^d	3.33±0.85 ^c	5.04±1.09 ^b	3.42±0.29 ^c	4.45±0.45 ^{bc}	13.37±1.31 ^a	4.35±0.55 ^{bc}	0.22±0.16 ^d	n.d. ^d
Hydroxybenzoic acid sulphate	n.d. ^c	0.34±0.04 ^b	0.43±0.10 ^a	0.29±0.04 ^b	0.26±0.01 ^b	0.34±0.01 ^b	0.28±0.04 ^b	0.02±0.00 ^c	0.01±0.00 ^c
Catechol sulphate	1.22±0.09 ^e	1.95±0.31 ^{de}	3.87±0.94 ^{cd}	1.25±0.25 ^{de}	9.82±1.33 ^b	16.65±1.30 ^a	5.50±1.23 ^c	2.50±0.16 ^{de}	2.25±0.25 ^{de}
Methyl catechol sulphate	0.17±0.11 ^c	3.51±0.75 ^{bc}	6.07±2.29 ^{bc}	2.88±0.63 ^{bc}	23.23±16.01 ^a	13.80±1.40 ^{ab}	5.88±0.88 ^{bc}	1.03±0.12 ^c	0.83±0.14 ^c
Hippuric acid	0.30±0.02 ^c	0.76±0.07 ^b	0.75±0.10 ^b	0.36±0.03 ^c	0.62±0.04 ^b	0.90±0.09 ^a	0.64±0.09 ^b	0.25±0.01 ^c	0.26±0.02 ^c

n.d.: not detected

Values in a row without a common superscript letter differ significantly ($p < 0.05$).