



Figure S1 The HPLC chromatogram of HEP

Table S1 Contents of the 18 polyphenols of HEP

No.	Compounds	Contents (mg/g HEP)
1	Gallic acid	15.18
2	4-Hydroxybenzoic acid	8.91
3	3,4-Dihydroxybenzoic acid	5.36
4	2,4-Dihydroxybenzoic acid	10.39
5	Chlorogenic acid	0.71
8	Caffeic acid	35.86
9	p-Coumaric acid	9.47
10	Sinapic acid	14.82
14	Quercetin 3-O-glucoside	56.21
17	4-Hydroxycoumarin	19.02
21	Vanillin	27.84
26	Quercetin	16.82
24	Kaempferol	19.91
28	Luteolin	12.77
19	Apigenin	1.67
20	Naringenin	1.19
22	Hesperetin	0.83
27	Chrysin	12.47
Total phenolics content		284.35

Table S2 Correlation of discriminating metabolites and antioxidant capacity in serum

No.	metabolites	GSH-Px	MDA	SOD	Cu ²⁺	ORAC
1	Tryptophan	-0.74*	0.36	-0.57	0.69	-0.62
2	2,4-Dihydroxybenzoic acid	0.81*	-0.33	0.67	-0.64	0.81*
3	20-Hydroxyeicosatetraenoic acid	-0.21	-0.17	-0.14	0.07	-0.38
4	Homovanillic acid	0.67	-0.52	0.88**	-0.95**	0.74*
5	Docosapentaenoic acid	0.67	-0.52	0.88**	-0.76	0.83*
6	Phenoxyacetic acid	0.67	-0.52	0.88**	-0.95**	0.74*
7	Myoinositol	-0.71*	0.05	-0.62	0.33	-0.6
8	N-Phenylacetyl glycine	0.64	-0.55	0.91**	-0.79*	0.86*
9	Fructose 6-phosphate	0.79*	-0.26	0.69	-0.76*	0.62
10	Heptadecanoic acid	0.26	-0.26	0.19	-0.17	0.31
11	Threonate	0.76*	-0.33	0.83*	-0.71*	0.93**
12	Abscisic acid	0.52	-0.45	0.67	-0.55	0.57
13	Cholic acid	-0.02	-0.21	-0.21	0.00	0.05
14	Sebacate	0.52	-0.52	0.74*	-0.57	0.74*
15	Vanillin	-0.50	0.43	-0.55	0.57	-0.71*
16	Vaccenic acid	0.81*	-0.38	0.93**	-0.81*	0.88**
17	Tyrosine	0.74*	-0.41	0.83*	-0.71*	0.86**
18	Pulegone	0.79*	-0.36	0.95**	-0.76*	0.91**
19	Methionine	0.67	-0.52	0.88**	-0.76*	0.83*
20	Lysine	0.60	-0.60	0.67	-0.79*	0.57
21	4-O-Methylgallic acid	0.76*	-0.29	0.83*	-0.74*	0.88**
22	Propionyl-L-carnitine	0.64	-0.60	0.62	-0.71*	0.57
23	Cytosine	0.81*	0.02	0.64	-0.64	0.67
24	Indole-3-acetic acid	0.74*	-0.31	0.76*	-0.76*	0.67
25	Nicotinamide	0.83*	-0.21	0.81*	-0.62	0.76*

** Spearman' correlation is significantly different at a level of 0.01; * Spearman' correlation is significantly different at a level of 0.05.