Electronic Supplementary Material (ESI) for Food & Function.

Supplementary Information

Malvidin-3-*O*-arabinoside ameliorates ethyl carbamate-induced oxidative damage by stimulating AMPK-mediated autophagy

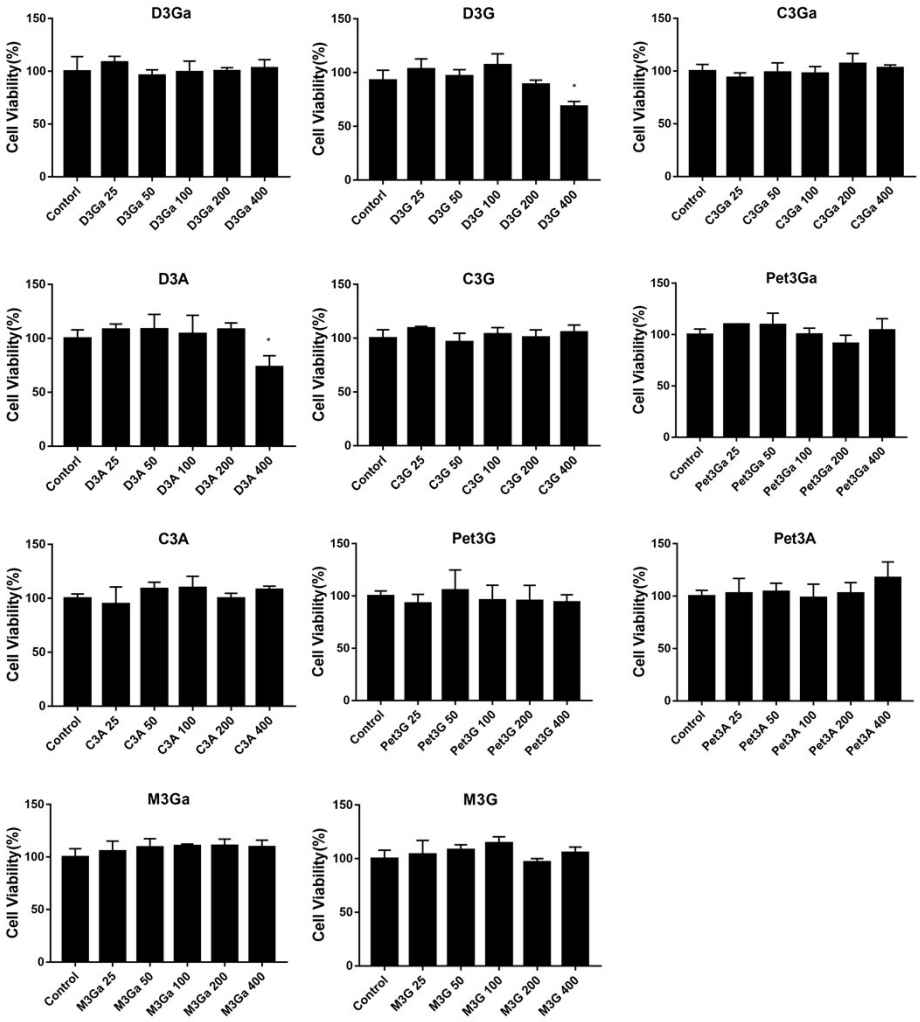
Table S1

Concentrations of anthocyanins (mg/100 g FW) in blueberry determined by HPLC.

Peak 1	Peak 2	Peak 3	Peak 4	Peak 5	Peak 6	Peak 7	Peak 8	Peak 9	Peak 10	Peak 11	Peak 12
D3Ga	D3G	C3Ga	D3A	C3G	Pet3Ga	C3A	Pet3G	Pet3A	M3Ga	M3G	M3A
27.63±0.1	7.94±0.2	4.55±0.3	15.03±0.2	1.32±0.2	26.29±0.1	2.39±0.2	7.44±0.3	9.37±0.6	28.81±0.4	12.78±0.2	20.35±0.4

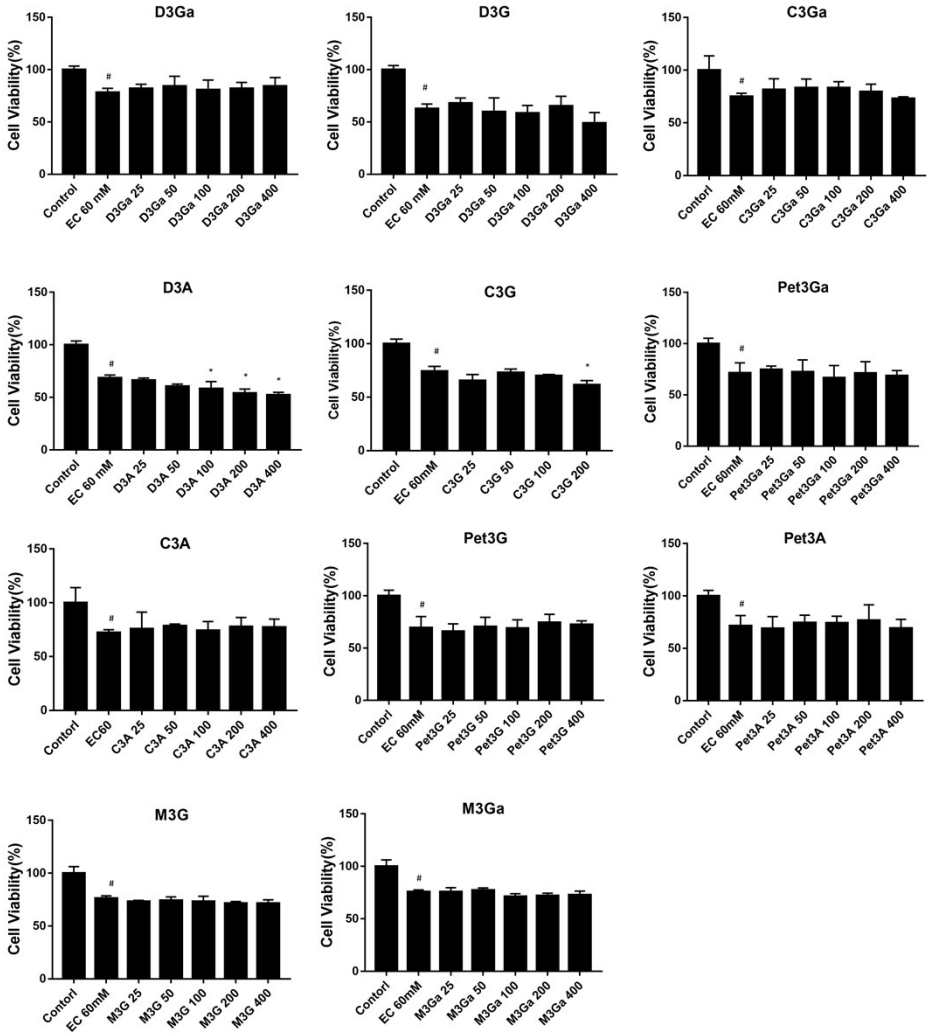
D3Ga, delphinidin-3-*O*-galactoside; D3G, delphinidin-3-*O*-glucoside; C3Ga, cyanidin-3-*O*-galactoside; D3A, delphinidin-3-*O*-arabinoside; C3G, cyanidin-3-*O*-glucoside; Pet3Ga, petunidin-3-*O*-galactoside; C3A, cyanidin-3-*O*-arabinoside; Pet3G, petunidin-3-*O*-glucoside; Pet3A, petunidin-3-*O*-arabinoside; M3Ga, malvidin-3-*O*-galactoside; M3G, malvidin-3-*O*-glucoside; M3A, malvidin-3-*O*-arabinoside

Fig. S1



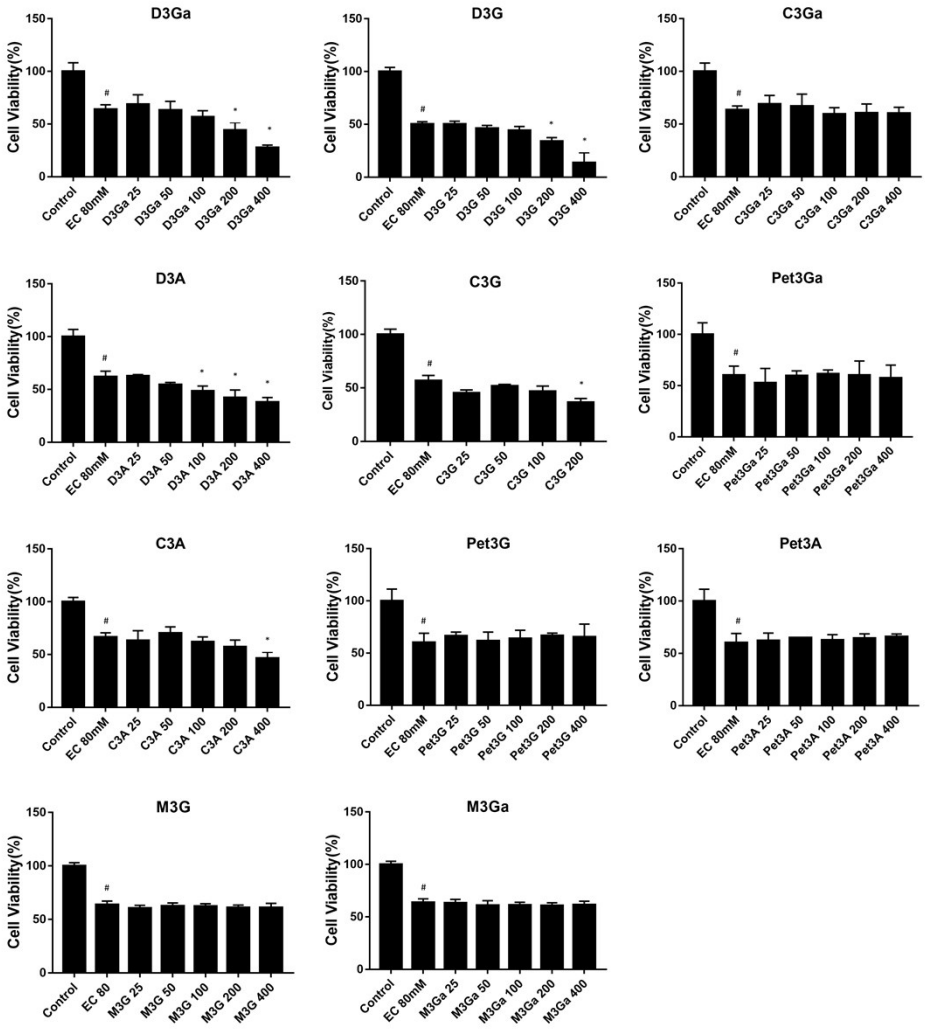
Caco-2 cells were first treated with different concentrations (25, 50, 100, 200 and 400 μM) of anthocyanins for 24 h. Cell viability was detected by MTT assay. *$p < 0.05$. D3Ga, delphinidin-3-*O*-galactoside; D3G, delphinidin-3-*O*-glucoside; C3Ga, cyanidin-3-*O*-galactoside; D3A, delphinidin-3-*O*-arabinoside; C3G, cyanidin-3-*O*-glucoside; Pet3Ga, petunidin-3- galactoside; C3A, cyanidin-3-*O*-arabinoside; Pet3G, petunidin-3-glucoside; Pet3A petunidin-3-*O*-arabinoside; M3Ga, malvidin-3-*O*-galactoside; M3G, malvidin-3-*O*- glucoside.

Fig. S2



Caco-2 cells were first treated with different concentrations (25, 50, 100, 200 and 400 μM) of M3A for 24 h and then incubated with 60 mM EC for 24 h. Cell viability was detected by MTT assay. #$p < 0.05$ versus control group, *$p < 0.05$ versus EC group. D3Ga, delphinidin-3-*O*-galactoside; D3G, delphinidin-3-*O*-glucoside; C3Ga, cyanidin-3-*O*-galactoside; D3A, delphinidin-3-*O*-arabinoside; C3G, cyanidin-3-*O*-glucoside; Pet3Ga, petunidin-3- galactoside; C3A, cyanidin-3-*O*-arabinoside; Pet3G, petunidin-3-glucoside; Pet3A petunidin-3-*O*-arabinoside; M3Ga, malvidin-3-*O*-galactoside; M3G, malvidin-3-*O*-glucoside; EC, Ethyl carbamate.

Fig. S3



Caco-2 cells were first treated with different concentrations (25, 50, 100, 200 and 400 μM) of M3A for 24 h and then incubated with 80 mM EC for 24 h. Cell viability was detected by MTT assay. #$p < 0.05$ versus control group, *$p < 0.05$ versus EC group. D3Ga, delphinidin-3-*O*-galactoside; D3G, delphinidin-3-*O*-glucoside; C3Ga, cyanidin-3-*O*-galactoside; D3A, delphinidin-3-*O*-arabinoside; C3G, cyanidin-3-*O*-glucoside; Pet3Ga, petunidin-3- galactoside; C3A, cyanidin-3-*O*-arabinoside; Pet3G, petunidin-3-glucoside; Pet3A petunidin-3-*O*-arabinoside; M3Ga, malvidin-3-*O*-galactoside; M3G, malvidin-3-*O*- glucoside; EC, Ethyl carbamate.