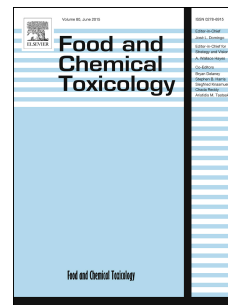


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Colonic metabolites from flavanols stimulate nitric oxide production in human endothelial cells and protect against oxidative stress-induced toxicity and endothelial dysfunction

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**Colonic metabolites from flavanols stimulate nitric oxide production in human endothelial cells and protect against oxidative stress-induced toxicity and endothelial dysfunction.**

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**Abbreviations:**

AKT/PKB, protein kinase B; AMPK, adenosine monophosphate-activated protein kinase; DAF-FM-DA, 4-amino-5-methylamino-2,7-difluorofluorescein diacetate; DCFH-DA, 2',7'-dichlorofluorescein diacetate; DHBA, 2,3-dihydroxybenzoic acid; DHPAA, 3,4-dihydroxyphenylacetic acid; eNOS, endothelial nitric oxide synthase; ERK, extra cellular regulated kinase; GPx, glutathione peroxidase; GSH, glutathione; HPPA, 3-hydroxyphenylpropionic acid; JNKs, Jun N-terminal kinases; NO, endothelial-derived nitric oxide; PI3K, phosphatidylinositol-3-kinase; *t*-BOOH, tert-butyl hydroperoxide;

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