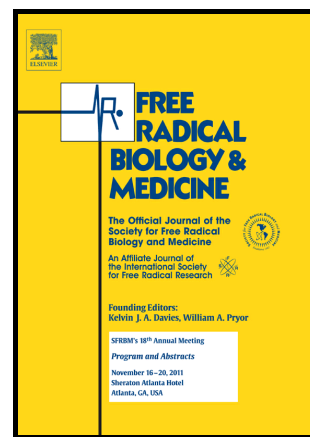


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Curcumin modulates endothelial permeability and monocyte transendothelial migration by affecting endothelial cell dynamics

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ABSTRACT

Curcumin is a phenolic compound that exhibits beneficial properties for cardiometabolic health. We previously showed that curcumin reduced the infiltration of immune cells into the vascular wall and prevented atherosclerosis development in mice. This study aimed to investigate the effect of curcumin on monocyte adhesion and transendothelial migration (TEM) and to decipher the underlying mechanisms of these actions.

Human umbilical vein endothelial cells (HUVECs) were exposed to curcumin (0.5-1 μ M) for 3 hours prior to their activation by Tumor Necrosis Factor alpha (TNF- α). Endothelial permeability, monocyte adhesion and transendothelial migration assays were conducted under static condition and shear stress

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