



## Effects of *DaeSiHo-tang* Extract on Hypertension and Arterial Contraction

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This study was undertaken to define the effect of *DaeSiHo-tang* extract on the hypertension in spontaneous hypertensive rat and norepinephrine-induced arterial contraction in rabbit.

Systolic blood pressure and blood velocity were significantly attenuated by administration of *DaeSiHo-tang* extract, but blood flow and renin-angiotensin-aldosterone system unaffected by *DaeSiHo-tang* extract.

The relaxation effect of *DaeSiHo-tang* extract was dependent on the presence of endothelium, showing that *DaeSiHo-tang* extract-induced relaxation was not observed in the strips without endothelium.

The endothelium-dependent relaxation induced by *DaeSiHo-tang* extract was decreased by the pretreatment of N<sup>o</sup>-nitro-L-arginine or methylene blue, but it was not observed in the strips pretreated with indomethacin or tetraethylammonium chloride.

When Ca<sup>2+</sup> was applied, the strips which were contracted by norepinephrine in a Ca<sup>2+</sup>-free solution, arterial contraction was increased. But pre-treatment of *DaeSiHo-tang* extract inhibited contractile response to Ca<sup>2+</sup>.

These results indicate that antihypertensive effect of *DaeSiHo-tang* extract is due to descend arterial resistance by the arterial relaxation through the formation of nitric oxide in the vascular endothelial cells.