

Antihypertensive activities of a solid-state culture of *Taiwanofungus camphoratus* (Chang-Chih) in spontaneously hypertensive rats

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Abstract

Wild and solid-state cultures (SSC) of *Taiwanofungus camphoratus* (aka *Antrodia camphorata* and Chang-chih [CC]) were sequentially extracted with cold water, methanol, and hot water to get cold-water-soluble (CWS), methanol-soluble (MS), and hot-water-soluble (HWS) extracts, respectively. Only the MS extract exhibited angiotensin-converting enzyme (ACE) inhibitory activities. The antihypertensive effects of the MS extract (10 mg/kg BW) were measured in spontaneously hypertensive rats (SHR) and Wistar Kyoto (WKY) rats. MS extract of the SSC type was able to effectively lower the systolic blood pressure (SBP) and diastolic blood pressure (DBP) of SHR, but not of WKY rats, the results being significantly different from those for distilled water only (the blank). However, wild CC and its MS extract were not as effective as the SSC type in reducing SHR blood pressure and had no effect on WKY rats. SSC-type CC might be developed into a health food with the ability to regulate blood pressure.