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### Preparation of Subcritical Water-Treated Okara and Its Effect on Blood Pressure in Spontaneously Hypertensive Rats

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Okara was hydrolyzed in subcritical water to increase the inhibitory activity of angiotensin I-converting enzyme (ACE) and soluble dietary fiber (SDF) content. The IC<sub>50</sub> of okara and subcritical water-treated okara (SC-okara) for ACE were 11.2 and 4.7 mg/ml, respectively, showing that SC-okara had about 2.4-fold higher inhibitory activity than okara. The SDF content in okara and SC-okara were 3.4 and 17.1%, respectively, showing that SC-okara had about 5-fold higher SDF content than okara. Powdered SC-okara or okara was fed to spontaneously hypertensive rats (SHR) at the level of 5% in a 1% NaCl (control) diet for 28 days. On the 14th and 28th days, the SHRs of the SC-okara group showed significantly lower systolic blood pressure compared to the control group. Thus, hydrolysis of okara by subcritical water is an effective technology for increasing ACE inhibitory activity and SDF content, which cause the hypotensive action.

**Keywords:** [okara](#), [subcritical water](#), [angiotensin I-converting enzyme](#), [soluble dietary fiber](#), [blood pressure](#), [spontaneously hypertensive rat](#)

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