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Angiotensin I-Converting Enzyme Inhibitory Action

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The angiotensin I-converting enzyme (ACE) inhibitory activity of fermented soybean paste (nabeshi) was investigated. The paste was fermented with the strongest ACE inhibitory activity among liquid fermented pastes. The paste was fractionated into 2 fractions with ethanol treatment. The major part of the inhibitory activity was contained in the supernatant fraction (S-fraction) and its intraperitoneal injection

hypotensive effect on spontaneously hypertensive rat (SHR). By column chromatography and two successive kinds of gel filtration, the inhibitory fraction was further separated into several fractions indicating that the activity of the fish sauce is caused by a combined action of various active substances present. From the fraction with the lowest 50% inhibitory value, three kinds of dipeptides, glycyl-tryptophan, isoleucyl-tryptophan, were isolated as the ACE inhibitory compounds. Oral administration of these peptides to SHR showed a hypotensive effect.

Keywords: [Angiotensin I-converting enzyme](#), [ACE](#), [hypertension](#), [tryptophan](#), [valyl-tryptophan](#), [isoleucyl-tryptophan](#)

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