

Effects of *Panax ginseng* C. A Meyer Fraction on Activities of Alcohol Metabolic Enzymes

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Abstract

This study were purposed to compare the activity of alcohol dehydrogenase (ADH) and acetaldehyde dehydrogenase (ALDH) of several *Panax ginseng* C. A Meyer fraction. *Panax ginseng* was extracted by cold-water, *n*-butanol, EtOH, and hot- water. The relative activities of ADH were 99.8% of protein fraction, 119.3% of crude polysaccharide fraction, 110.3% of saponin fraction, 108.1% of peptide fraction and 122.4% of low molecular fraction (MW < 1,000). Specifically, crude polysaccharide fraction and low molecular fraction showed significant increase of ADH activity. The relative activities of ALDH were 93.2% of protein fraction, 93.0% of crude polysaccharide fraction, 96.5% of saponin fraction, 88.0% of peptide fraction, 108.2% of low molecular fraction. The facilitation rate of ALDH activity in low molecular fraction was the highest. These results indicate that alcohol metabolizing activity can be enhanced by either crude polysaccharide fraction or low molecular fraction *in vitro*.

References

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