

Effects of Korean Ginseng and Other Ginseng on Alcohol Metabolizing Enzyme Activities

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Abstract

The effects of extracts and fractions prepared from *Panax ginseng* C. A. Meyer and *Panax quinquefolium* L. on the activities of alcohol dehydrogenase (ADH) and acetaldehyde dehydrogenase (ALDH) *in vitro* were examined. *P. ginseng* crude polysaccharide fraction showed significant increase of ADH activity. Facilitating rate of ADH activity was 139.3% of *P. ginseng* crude polysaccharide fraction. On the other hand, facilitating rate of ADH activity of *P. quinquefolium* crude polysaccharide fraction seemed not to be affected. The relative activities of ALDH were 124.4% of *P. ginseng* low molecular fraction and 116.3% of *P. quinquefolium* low molecular fraction. Both of the ginsengs low molecular fraction resulted in enhancement of the ALDH activity. These results indicate that alcohol metabolizing enzyme activities can be enhanced by *P. ginseng* crude polysaccharide fraction and ginsengs low molecular fraction *in vitro*. *P. ginseng* was more effective than *P. quinquefolium* on activation of alcohol metabolic enzymes.

References

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