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Diuresis effects of rhizoma alismatis after different processing.

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【Purpose】Alismatis (rhizoma of *Alisma orientalis* (Sam.)Juzep.) is one of the diuresis Chinese herbs. However, the processed alismatis are more popular used than raw material. Because, the processed-alismatis can enhance the pharmacological functions, the bioactive compounds will be changed. In the present investigation, we will process alismatis by ourselves.

【Methods】5 different processing composite of Alismatis rhizoma were administrated to mice (500mg/kg). The urine of awake mice was collected. The changes of urinary volume, sodium, potassium ion concentration and protein were measured. The quantitative analysis of 23-Acetyl alisol B analysis was detected by HPLC system in raw and processed. Moreover, the frigerprints of the HPLC-Mass and GC-Mass will be used to compared between raw and processed of alismatis. The other hand, the diuresis effects of alismatis will be evaluated between raw and processed *in* ICR mice.

【Results and Discussion】High content of 23-Acetyl alisol B was noted in raw Alismatis rhizoma, the diuretic effect of Alismatis rhizoma was not dominant ( urine amount in 12 hours 1.29ml ±0.34ml. $p=0.3$, compared to blank ) but fluctuation of serum potassium ion concentration (7.06 Eq/L± 0.61 Eq/L, $p<0.05$) and urine protein ( 79.67 mg/dL±45.68 mg/dL, $p<0.05$) might induced systemic toxicity. The diuretic effect of processing composite with salt was signalized ( urine amount in 12 hours 1.41ml ±0.39ml. $p<0.05$, compared to blank ) but there was no significant change in the concentration of sodium, potassium ions of serum.

The raw Alismatis rhizoma had marked diuretic effects in mice. The composite with processing in salt could decrease the change of sodium and potassium ion concentration in serum than original.