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*Solanum lyratum* (Solanaceae) has been used as a traditional analgesic, antipyretic and hepatoprotective agents in Korea. In this study, we investigated the hepatoprotective effect of ethylacetate extract of *Solanum lyratum* (SL) on the dimethylnitrosamine (DMN)-induced liver damage in rats. Oral administration of SL (150, 300 mg/kg daily for 4 weeks) into the DMN-treated rats remarkably prevented the elevation of serum alanine transaminase, aspartate transaminase and alkaline phosphatase levels. SL also increased serum protein level and reduced the hepatic level of malondialdehyde in DMN-treated rats. Furthermore, DMN-induced elevation of hydroxyproline content was reduced by the treatment of SL. In conclusion, these results demonstrated that SL exhibited *in vivo* hepatoprotective effect against DMN-induced liver injury, and suggest that SL may be useful in the prevention of liver damage.

[PA4-26] [ 04/17/2003 (Thr) 14:00 - 17:00 / Hall P ]

#### Effect of Proanthocyanidins on Dimethylnitrosamine-Induced Liver Damage in Rats

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Proanthocyanidins, one of the major natural polyphenolic compounds of grape has been reported to exhibit a wide range of pharmacological properties. In this study, we investigated the hepatoprotective effect of proanthocyanidins on the dimethylnitrosamine (DMN)-induced liver damage in rats. Oral administration of proanthocyanidins (20, 50mg/kg daily for 4 weeks) into the DMN-treated rats remarkably prevented the elevation of serum alanine transaminase, aspartate transaminase and alkaline phosphatase, and bilirubin levels. Proanthocyanidins also increased serum protein level and reduced the hepatic level of malondialdehyde in DMN-treated rats. Furthermore, DMN-induced elevation of hydroxyproline content was reduced by the treatment of proanthocyanidins and which result was consistent with a histochemical analysis of liver tissue stained with Sirius red. In conclusion, these results demonstrate that the *in vivo* hepatoprotective effect of proanthocyanidins against DMN-induced liver injury, and suggest that proanthocyanidins may be useful in the prevention of liver damage.

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#### Inhibition of capsaicin on pulmonary metastasis of B16-F10 melanoma cells

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Capsaicin (8-methyl-N-vanillyl-6-nonenamide), a pungent ingredient of hot chili peppers, has been reported to possess substantial anticarcinogenic and antimutagenic activities. In the