carried to examine the effects of oxyresveratrol(2,3', 4,5'-tetrahyroxystilbene) which is a naturally occurring comfound particularly found in Morus alba L.. on LPS-induced iNOS and COX-2 expressions and activities in RAW 264.7, mouse macrophage cell line and carragenin-induced rat paw edema. The results suggested that antiinflammatory properties of oxyresveratrol might be correlated with inhibition of the iNOS expression through down-regulation of NF-kB binding activity and significant inhibition of COX-2 activity.

[PA4-13] [04/20/2001 (Fri) 10:30 - 11:30 / Hall 4]

Effects of Fractions of Houttuynia cordata THUNB on the Accumulation of Cadmium and Induction of Metallothionein in Rats(VI)

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This study was conducted to investigate the antitoxic effects of Houttuynia cordata THUNB with chloroform and ethyl acetate fractions. The results were as follows:

- 1. Detoxication effects of chloroform and ethyl acetate fractions of Houttuynia cordata THUNB were increased in proportion to the dosages. Detoxication effects of ethyl acetate fraction of Houttuynia cordata THUNB were higher than chloroform fraction of Houttuynia cordata THUNB's results and detoxication effects in kidney were higher than liver's results.
- 2. Metallothionein concentrations in liver were higher than kidney's concentrations and ethyl acetate fraction of Houttuynia cordata THUNB was better than chloroform fraction of Houttuynia cordata THUNB in induction of metallothionein.
- 3. After the administration of chloroform and ethyl acetate fractions of Houttuynia cordata THUNB, body weights was increased in proportion to chloroform and ethyl acetate fraction's dosage of Houttuynia cordata THUNB but changes of body weight were little since 3 weeks. From the above results, this study suggests that chloroform and ethyl acetate fraction of Houttuynia cordata THUNB increased metallothionein induction to cadmium intoxication in rat's kidney and liver and decreased the toxicity of cadmium in rats.

[PA4-14] [04/20/2001 (Fri) 10:30 - 11:30 / Hall 4]

Effects of GY and GA on the hepatic cytochrome P450 in mice

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There have been numerous reports of the antihepatotoxic activity of glycyrrhizin, a triterpenoid saponin of Glycyrrhiza glabra L. as well as its genuine aglycon, 18beta-glycyrrhetinic acid, but little attention has been paid to regarding to its effects on the cytochrome P450 (P450). Therefore, in this study, we investigate the effects of glycyrrhizin and 18beta-glycyrrhetinic acid on the constitutive and inducible microsomal activities and expression of P450 in mouse. The administration of 18beta-glycyrrhetinic acid to mouse significantly decreased the activities of microsomal pentoxyresorufin O-dealkylase, aniline hydroxylase and ethoxyresorufin O-deethylase representative activities of P4502B1/2, P4502E1 and P4501A1 respectively, in a dose-dependent manner. However glycyrrhizin was not effect to all enzyme activity in mouse. Suppressions of P450 isozyme expression occurred in 18beta-glycyrrhetinic