

Pharmacological Effects of Cinamomi Radix, *Cinnamomum cassia* Stem Bark Aqueous Extracts on the High Fat Diet Supplied Mice

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PURPOSE: The object of this study is to observe the dosage-dependent pharmacological effects of an aqueous extracts of dried stem barks of *Cinnamomum cassia* Blume [Cinamomi Radix, Korean name: Kae-Phee, KAP] on 45%/Kcal high fat diet (HFD) supplied mice.

METHODS: 45%/Kcal rodent HFD are supplied to ICR mice from 1 week before initiation of KAP administration throughout the 12 weeks, and after the end of 12 weeks of 62.5, 125 and 250mg/kg/day of KAP administration, the efficacy was divided into five categories – 1) hypoglycemic, 2) hepato-protective, 3) nephroprotective, 4) hypolipemic, and 5) anti-obesity effects.

RESULTS: After end of 84 days of continuous treatment of three different dosages of KAP, all diabetes related complications were inhibited; relatively favorable anti-obesity, hypolipemic, hepatoprotective, hypoglycemic and nephroprotective effects.

CONCLUSION: Although the exact mechanisms were unknown in the present study and should be tested in future with active compound searches, the effects of KAP extracts may be mediated by free radical scavenger activity, IKK β inhibition, decreased absorption of glucose, inhibition of pancreas cholesterol esterase, AMP-activated protein kinase or complicated mechanism of them.

Key Word: KAP, high fat diet, ICR, hypoglycemic, mice

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