

**[P1-12]****Plasma Concentration and Urinary Excretion of Isoflavone After Ingestion of Three Soy Products for 3 Weeks in Korean Women**

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Recently, soybean is receiving attention because of their numerous beneficial effects. Epidemiologic study showed that Asian countries have significant health benefits because of their traditional diet that have high contents of the isoflavones. However, the available epidemiologic data are weakly supportive for this hypothesis. This study was performed to investigate the plasma concentration and urinary excretion pattern of isoflavone through the long term consumption of soy products. We conducted a long term study of three soy products with different ratio of aglycone/glucoside in 26 healthy female volunteers (20-30 years of age). After ingestion of three soy products (isogen, soymilk, and fermented soybean), the plasma and urine concentrations of isoflavones were measured by HPLC. After first ingestion of soy products, the plasma concentration of daidzein and genistein were significantly increased. With continuing ingestion for 21 days, plasma concentration of daidzein and genistein were not significantly different in three groups. After soy product consumption for 21 days, urinary excretion of daidzein, genistein and equol were significantly increased. After ingestion of isogen and soymilk (21.0mg/day and 17.0mg/day) for 21 days, urinary excretion of daidzein were significantly higher than fermented soybean consumption groups (11.7mg/day). Urinary excretion of genistein in soymilk ingestion group (13.1mg/day) was significantly higher than isogen and fermented soybean ingestion groups (8.44mg/day and 5.6mg/day, respectively). To obtain the desired effects, it is necessary to maintain a plasma concentration constantly for a long period. Plasma concentration of isoflavone was significantly increased by long term ingestion but the increased amount each group was not affected by soy product types. Any soyfood is useful equally in human health by long term consumption.