**FLAVONOIDS CONTAINED IN FLAVOCOXID REDUCE ATHEROSCLEROSIS DEVELOPMENT IN APOE KO MICE FED WITH A WESTERN HIGH FAT DIET**

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Flavonoids contained in flavocoxid, namely baicalin and catechin, possess a strong anti-inflammatory activity. We tested the effect of flavocoxid in ApoE knock out mice fed with a high fat western diet. Mice were 5 weeks old at the beginning of the experiment and were fed with a high fat diet for 14 weeks. A group of mice received flavocoxid by oral suspension everyday from week 5 to week 14, at the human equivalent dose of 500 mg/day (20mg/kg/day) that is commonly used in clinical practice. The body weight, food intake, cholesterol, and triglyceride levels were recorded every week and at the time of sacrifice the thoracic aorta, liver, and blood samples were taken. Flavocoxid reduced blood levels of triglycerides and cholesterol and the extent of atherosclerotic plaques. In liver samples the mRNA expression of PPAR-alpha and SREBP-1 was significantly affected by flavocoxid ($p<0.05$ vs untreated ApoE mice), and the western blot analysis demonstrated an increased expression of the AMPK-alpha kinase demonstrating increased cellular metabolism in treated animals ($p<0.05$ vs untreated ApoE mice). The positive results obtained in this pre-clinical model further support the use of flavocoxid to reduce atherosclerosis.