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Oriental Herb Extract and its Role in Antioxidation and Anti-wrinkle

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The human skin is constantly exposed to environmental irritants such as ultraviolet, smoke, chemicals. Free radicals and reactive oxygen species caused by them play critical roles in cellular damage. They are not only damaging in the skin structure but they are also participating in the immensely complex inflammatory reaction. Anti-wrinkle effects of the Oriental herb extracts (OHE) were evaluated by the determination of anti-oxidation, collagenase inhibition and collagen synthesis in normal human fibroblast. OHE showed antioxidative activity as much as vitamin C and trolox. Also OHE showed promotive effect on collagen synthesis and inhibitory effect on collagenase activity. These results demonstrated that OHE could be useful as an anti-wrinkle cosmetic ingredient.

Key words: Oriental herb, anti-wrinkle, antioxidation, cosmetic

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Effects of Mulberry Leaves Powder on the Loperamide-Induced Constipation in Rats

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This study was conducted to investigate the preventive effect of mulberry leaves powder (MLP) on the loperamide-induced constipation in rats. Male Sprague-Dawley rats were pretreated with MLP contained in diet at the concentration of 0%, 5% and 10% over 32 days. Rats were fed control diet (NC), and diets containing 0% MLP and loperamide administration (C), 5% MLP and loperamide administration (MLP5), and 10% MLP A and loperamide administration (MLP10). Constipation was induced by subcutaneous injection of loperamide (4 mg/kg/day) 3 days prior to sacrifice. Food efficiency ratio was not affected by the supplemented diet of MLP, but the body weight gain and food intake were reduced in proportion to a feeding amount of MLP. Serum total cholesterol, LDL-cholesterol and triglyceride concentrations were lowered, and HDL-cholesterol and atherosclerotic index were increased in rats fed the MLP diets in proportion to a feeding amount of MLP. Treatment of loperamide resulted in decreases in the number and wet weight of fecal pellets, and fecal water content. However, the number and wet weight of fecal pellets, and fecal water content were increased in MLP-pretreated groups compared to the loperamide-treated group. Furthermore, gut transit time and transit speed were shortened, and length of gut was elongated in MLP-pretreated groups compared to the loperamide-treated group. These results indicate that MLP may be effective to improve the constipation.

Key words: Mulberry leaves powder, constipation, loperamide