

Amelioration Effect on Allergic Disorder by *Ligustrum lucidum* Ait, a Lycium-Composed Formula

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Recently, people appealing for allergic disorder increase. *Ligustrum lucidum ait* (*LLA*), which is water extracts of Lycii Fructus, Crataegi Fructus, Phyllanthi Fructus, Chrysanthemi Flos, Coicis Semen, *Ganoderma lucidum*, and Zizyphi Fructus, has a significant folk history in Japan and China. In order to provide an evidence-based supplement, we investigated the possible anti-allergic effect of *LLA* using mice spleenocyte and human. *LLA* concentration-dependently inhibited interleukin (IL)-4 and IL-10 production from mice spleenocyte, and the lower concentration of *LLA* significantly increased interferon (IFN)- γ production. Thus *LLA* might block the pathogenesis of allergy through correcting the immune homeostasis skewed in favor of Th2. Meanwhile, the amelioration effect of atopic dermatitis by *LLA* was found in human. Further, the oral administration with *LLA* significantly increased CD8+ T-cell numbers in patients and natural killer (NK)-cell activity in the old man volunteer. These results suggested that *LLA* might be useful as an immunomodulatory agent and for preventing and treating allergic disorders.

Key words: Lycii Fructus, anti-allergy, cytokine, atopic dermatitis

Inhibitory Effects of Seven Chinese Herb Extract Essences on Melanin Formation in B16 Melanoma Cells

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Effects of healthy drink, Meirusenju (MRSJ), which is composed of the essences of *Lycium chinense* Miller, *Crataegus cuneata* Siebold et Zuccarini, *Phyllanthus emblica* L, *Chrysanthemum morifolium*, *Zizyphus jujuba* Miller var. *inermis* Rehd, *Ganoderma lucidum*, and *Coix lacryma-jobi* L. var. *mayuen* Stapf, on melanin formation in B16 melanoma cells were studied. MRSJ inhibited the melanin formation in a dose -dependent manner. In seven Chinese herb extract essences, *Canoderma lucidum* showed the strongest inhibitory activity without cytotoxicity. MRSJ also showed antioxidant characteristics such as reducing power and free radical scavenging capacity. The antioxidant properties of MRSJ may also contribute to the inhibition of melanogenesis. MRSJ could be applied as an inhibitor of melanogenesis and a natural antioxidant in skin care products.

Key words: Chinese herb extract essences, melanogenesis, anti-oxidation