

ATOPIC ECZEMA/DERMATITIS

## EVALUATION OF SCORAD IN ADULTS WITH ATOPIC DERMATITIS RECEIVING LACTOBACILLUS PLANTARUM IS-10506 SUPPLEMENTATION

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**Introduction:** Atopic dermatitis (AD) is a chronic recurrent inflammatory skin disease characterized by the imbalance of Th1 and Th2. Lactobacillus plantarum IS-10506 is a novel probiotic isolated from dadih, an Indonesian traditional fermented buffalo milk. The supplementation of Lactobacillus plantarum IS-10506 in AD is expected to decrease and improve the severity of AD.

**Objective:** To assess the probiotic function of L. plantarum IS-10506 in adults with mild and moderate AD.

**Materials and Methods:** A randomized single blind-controlled trial comparing microencapsulated L. plantarum IS-10506 (1010 cfu/day) and placebo (skim milk-Avicel) twice daily for 8 weeks was conducted in an outpatient clinic on adults with mild and moderate AD. The trial included 30 samples divided into intervention (n=15) and control groups (n=15). Scoring Atopic Dermatitis Index (SCORAD) were assessed.

**Results:** Demographic and baseline characteristics were not significantly different between the two groups. SCORAD were significantly lower in the probiotic group than those in the placebo group on the 4th weeks (p 0.040) and on the 8th weeks (p 0.022). On the 4th weeks, SCORAD on probiotic group decreased to  $17,20 \pm 6,79$  and on the 8th decreased to  $9,61 \pm 2,55$ .

**Conclusions:** Supplementation with the probiotic L. plantarum IS-10506 offered a potential treatment for AD in adults. Further long-term studies with a larger sample size are required to confirm the therapeutic efficacy of L. plantarum IS-10506 in AD.