

Title : THE EFFICACY AND SAFETY OF FACIAL CLEANSING
PRODUCT CONTAINING EXTRACT OF TAMARIND'S
FRUIT PULP

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Abstract

Tamarind's fruit pulp has been used for centuries as skin-scrubbing material to smoother and lighter skin appearance. However, there is no evidence demonstrating the clinical benefits of this fruit pulp. As the cleansing lotion containing tamarind's fruit pulp extract was formulated, we conducted a clinical trial evaluating its efficacy and safety in healthy volunteers.

The study design was double blinded, randomized side of face, placebo controlled trial. Healthy female with aged 18-40 years were enrolled. All subjects received both test and placebo products. One product was applied on one side of face, while another product was applied on the other side of face twice daily for 8 weeks. Primary outcome was the difference of skin color measured by Mexameter at week 8 between the test and the control side of face. In addition, skin redness, hydration, pH, elasticity, transepidermal water loss of skin, adverse event, subject's satisfaction, and compliance of subjects were assessed as secondary outcomes.

Thirty-eight subjects with average age of 25.6 years were included in study. There was no lost to follow up. At week 8, the mean differences of all skin parameters including skin color, pH, hydration, and elasticity of skin between the test and the control side of face were not statistically significant ($p > 0.05$). However, most subjects were satisfied with the test product and expressed interest in using its. The mean differences

of all irritation parameters including skin redness, and TEWL of skin between the test and the control side of face were not statistically significant ($p>0.05$).

In conclusion using the test product did not show the significant difference of skin color when compared that with using the placebo product. However, this product was safe for daily use and most subjects were satisfied with this product and expressed interest in using it. We suggested that the leave-on products containing tamarind's extract should be developed and determined its efficacy.

