

COMPARING THE ANTI-AGING POTENTIAL OF CINNAMON EXTRACT CREAMS ON SKIN HYDRATION, ELASTICITY, AND SEBUM PRODUCTION USING MACERATION AND PERCOLATION METHODS

Dennis Dominika¹, Linda Chiuman²

^{1,2} Biomedical Science Magister Program, Faculty of Medicine, Dentistry and Health Science, Prima Indonesia University, Medan, Indonesia

ABSTRACT

Aging is a process that affects many different aspects of health and well-being, with skin-related issues such as hydration, sebum production and elasticity being of particular concern. Cinnamon, known for its beneficial properties, is gaining popularity as a natural skin care ingredient. This study aimed to evaluate the effectiveness of cinnamon extract in improving skin elasticity, sebum production and hydration in male white mice. Additionally, we compared two extraction methods, maceration and percolation method, to determine their impact on the effectiveness of cinnamon extract cream. Creams containing 10% cinnamon extract were prepared and applied to the skin of male mice for a period of 4 weeks. Skin elasticity, sebum production levels and hydration were measured periodically using the EH-900 skin analyzer. After 4 weeks of treatment, cinnamon cream significantly increased skin elasticity, sebum production and hydration compared to the negative control group ($p < 0.05$). Notably, there was no significant difference between the two extraction methods, suggesting that maceration and percolation methods are equally effective in harnessing the beneficial properties of cinnamon extract for skin care applications. The results of this study show that cinnamon has the ability to improve hydration, elasticity, and sebum production when included in cream formulations. The choice between maceration and percolation method did not affect the effectiveness of cinnamon extract in improving skin parameters. Cinnamon extract is a promising resource for anti-aging skincare products. Further research is needed to explore the long-term and possible side effects

Keywords : Antiaging, Cinnamon, Extract, Elasticity, Hydration, Sebum

Biography

Corresponding author : drg Dennis Dominika, M.A

Biomedical Science Magister Program, Faculty of Medicine, Dentistry and Health Science,
Prima Indonesia University, Medan, Indonesia

Full address : Subur baru, Sisingamangaraja 11 H Medan, North Sumatra, 20147

Contact Phone Number : +62 81376189775

Email : dentalunionmedan@gmail.com