ROLE OF RED FRUIT (PANDANUS CONOIDEUS) TOWARDS PHOTAGING INHIBITION IN MICE SKIN

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Introduction: Early aging is caused by sunlight exposure and can be prevented by antioxidant administration. Lately, people tend to use natural ingredients that contain antioxidants. Red fruit from Papua contains a lot of antioxidants and can be used as one of the alternatives to prevent early aging.

Objective: This study aimed to know the role of red fruit towards photoaging inhibition, which was assessed from total number of type I procollagen in mice skin.

Materials and Methods: This was an animal experimental study, mice was used as the model animal and was divided into 3 groups. Group 1 was control group, group 2 was exposed with ultraviolet ray from artificial source, group 3 was exposed with ultraviolet ray and recieved red fruit orally. Biopsy of the skin was done after treatment, checked using immunohistochemistry with staining of type I procollagen and then evaluated using computer program. This study was approved by Research Ethics Committee of Faculty Medicine, Diponegoro University/ dr. Kariadi Central Hospital, Semarang, Indonesia

Result: This study showed an increased expression of type I procollagen in group 3 compared with group 2.

Conclusion: Red fruit can be used to prevent photoaging.