AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

A STUDY OF COLLAGEN POTENTION DERIVED FROM NON COMMERCIAL SEA CUCUMBER HOLOTHURIA ATRA AND COMMERCIAL SEA CUCUMBER STICHOPUS VASTUS

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Introduction: Sea cucumber has been known to contain collagen. Commercial sea cucumbers today began to be difficult to find in some areas in Indonesia, therefore the use of non commercial sea cucumbers need to be explored.

Objective: This study aimed to know the collagen rendement value of non commercial sea cucumber Holothuria atra compared to commercial sea cucumber Stichopus vastus as a basis for the next study to determine the ability of collagen extracts from sea cucumbers for the benefits of anti aging and skin health in pre-menopause, menopause, and post-menopause women.

Materials and Methods: It was an observational study. Sea cucumbers were retrieved from Karimunjawa waters. The steps included preparation, extraction, and isolation. Preparation included defatting, demineralisation, and removing non-collagen protein.

Result: Collagen rendement value of Stichopus vastus and Holothuria atra were 0,174% and 0,126% respectively.

Conclusion: Collagen rendement value of Stichopus vastus was 38% higher than Holothuria atra

Keywords: collagen, antiaging, Holothuria atra, Stichopus vastus, sea cucumber