



## HIVI (Hardtack Innovation Fish Scale) cookies made from fish scales to optimally increase nutrition

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### Abstract

Indonesia is a maritime axis in the world due to its strategic location between oceans and vast waters, because of its strategic location Indonesia is also the largest fishery producer in Southeast Asia, especially in fishery products. Various kinds of fishery products produced include food, multivitamins to pharmaceuticals. The innovation that we made is making biscuits with the main ingredients that most people don't think of, namely fish scales. HIVI biscuits with the main ingredients of fish scales have a high collagen content of around 25% per 100 grams of samples which are usually only used as ingredients for the manufacture of cosmetics and other pharmaceutical ingredients that should be used as a source of protein in foods such as HIVI which uses collagen as a high source special protein lysine for rebuilding calcium in the human body. Macronutrients of HIVI biscuits, carbohydrates and fats are also fulfilled with additional ingredients such as corn flour, kidney beans, and honey. Its existence was analyzed by the proximate analysis method. Proximate analysis is a chemical test to determine the nutrient content of feed ingredients or feed which is divided into six nutritional fractions, namely water content, ash, crude protein, crude fat, crude fiber and extract without nitrogen (BETN). The hope is that with the presence of HIVI biscuits that can meet the nutrition of many people, especially being the first food diversification that is very efficient for humans who experience nutritional disorders, such as stunting, and osteoporosis.

### Biography

Lutvi is currently undergoing a double degree at the National University of Singapore and GadjahMada University, Indonesia, at the age of 20 years. he is the youngest researcher at his university. For the HIVI project, he got an association from the Faculty of Pharmacy, GadjahMada University named Muhammad Bagaskara Reza Pratama, for the section on health promotion and medicine.

### Publications

Lutvi Abdullah. "Journal of Nutritional Health & Food Engineering". 2019 Mar; 9(3):87-90.

Lutvi Abdullah. "Journal of Diabetes, Metabolic Disorders & Control". 2018 Sep; 5(5):177-180



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