

OAT 515 HEALTHY FOOD DEVELOPMENT IN COOPERATION WITH THE PLUG AND PLAY INDUSTRY

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ABSTRACT

Abstract

This research was conducted with the aim of producing snack bar products made from oats and whey milk protein that can be consumed as an alternative to healthy snacks. The specific objectives of this research are: 1) To find a snack bar recipe made from oats and whey milk protein; 2) Knowing the nutritional content of snack bars made from oats and whey milk protein; 3) Packaging and providing attractive labels on snack bar products made from oats and milk protein whey; 4) Calculating the selling price of snack bars made from oats and milk protein whey; 5) Knowing the level of public acceptance, especially cyclists, of snack bars made from oats and milk protein whey; 6) Knowing the oat bar marketing cooperation model with plug and play

This study uses the Research and Development (R&D) method, with the 4D development model (Define, Design, Development and Dissemination). The research was carried out in July-October 2022. The research was carried out at the Food Laboratory, Faculty of Engineering, UNY. Data analysis used descriptive statistics and t test. Research was conducted for 4 months to produce oat bars that are rich in energy and protein, have attractive packaging and are liked by consumers. This Oat Bar product is expected to support the improvement of health status and new business alternatives.

Based on the stages of product development, the following results were produced: 1) Recipe for OAT 515, namely 40 grams of oats, 18 grams of margarine, 10 grams of sweetened condensed milk, 10 grams of granulated sugar, and 10 grams of whey protein milk. These materials are processed by mixing and baking techniques. 2) The results of the analysis show that the water content is 3.3%, ash is 1.57%, protein is 11.6%, fat is 20.1%, carbohydrates is 53.2% and every 100 gram snack bar produces 437 cal of calories. 3) Packaging using aluminum foil to keep the product safe and labels with elegant designs add to public appeal. 4) One OAT 515 is sold at Rp. 5.000,- in accordance with the market price range of Snack Bar and is expected to compete with other products because it is high in protein. 5) Public acceptance of the results of the acceptance test for OAT 515 products which include color, aroma, texture, taste and overall is liked or in other words well received from the acquisition of an overall point of 4.16 on a scale of 1-5. 6) The results of the t test show that the reference product is not significantly different from the development product.

Kata Kunci: *Keywords: Healthy food, Oat Bars, Whey Protein, Plug and Play Industry*