

**PROTEIN BAR FORMULATION WITH THE ADDITION OF SOY
PROTEIN ISOLATE AS AN INTERMEDIATE FOOD TO INCREASE
MUSCLE MASS IN BODYBUILDING ATHLETES**

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ABSTRAK

A bodybuilding athlete, especially in endurance or strength sports (powerlifting), it is very important to balance calories in and calories out, this aims to regulate endurance. In research Amatori, S., Callarelli, C., Gobbi, E., Bertuccioli, A., Donati Zeppa, S., Sisti, D., & Perroni, F. (2023) on 18 male and female bodybuilding athletes (8 vegan and 10 non-vegan) with the result that vegan bodybuilders had difficulty achieving protein requirements when experiencing a calorie deficit. One of the functional foods that can fulfill nutritional intake is foods high in protein. This research is to determine the characteristics and nutrition, especially protein in protein bars with the addition of Soy Protein Isolate. The research was designed using RAL (Completely Randomized Design), namely using 4 treatments P1= 35% ISP, P2= 40% ISP, P3= 45% ISP, and P4= 50% ISP. Organoleptic results showed that all treatments tended to be liked by panelists in terms of color, aroma, taste and texture. The nutritional composition produced from the best P1 treatment protein bar (35% ISP) is 255.43 kcal energy, 19.4 grams protein, 8.4 grams fat and 33.9 grams carbohydrates. The recommended serving size for protein bars in one consumption for bodybuilding athletes is 2-3 bars (63/gram consumption).

Keywords: Protein bar, Isolate Soy Protein, Bodybuilding Athletes, High Protein