The popularity of yogurt is increasingly related to the mode of life of the population, which includes yogurt in the diet for being practical and due to easy consumption, besides the positive image as a safe and nutritious food. The present study aimed to develop yogurt enriched with protein isolate from croaker (*Micropogonias furnieri*), and determine the physicochemical properties of the products, and compare them with commercial yogurt. Three experimental groups were prepared: Yogurt made with croaker protein isolates (residue, muscle and surimi) at a concentration of 1.5%. The yogurts were analyzed for total soluble solids (°Brix), acidity (% lactic acid) and pH. The yogurts produced with protein isolate of croaker muscle and residue showed 19.13° Brix and 20.20° Brix of total soluble solids, 0.97% and 0.90% acidity, and 4.11 and 4.12 pH respectively. While the yogurt made with surimi showed 19.87° Brix of soluble solids, 0.94% acidity and 4.13 pH. The yogurt made with fish protein showed significant differences (p <0.05) between the results. These results were similar to those obtained in commercial yogurt, which showed 21.96 ° Brix, 0.76% and 3.85 of soluble solids, acidity and pH respectively. The physical-chemical results obtained in the experiments are consistent with the minimum parameters defined by Brazilian law for the product. Therefore, the fish protein may be used in the production of yogurt together or replacing other ingredients of the formulation.