DEVELOPMENT OF FISH FLESH POWDER AND POWDER-BASED COOKIES AND SNACKS FROM PANGUS, SILVER CARP, TILAPIA AND TUNA FISH (PATENT NO: IPC: A 23L 17/00, 1006455, 19/2020)

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Abstract

Generally, the cookies and snacks available in the market are made of flour, leavener, salt, sugar, butter, egg, oil and some other extra added flavor in some special case. White, processed flour and more starch in the regular diet increase blood sugar, which in turn puts unnecessary stress on the liver. Fish consumption helps to reduce coronary heart disease incidence and mortality due to having beneficial effects omega-3 PUFA, EPA & DHA. Increased protein intake also balances blood sugar and insulin, reducing cravings and detoxing the liver. Therefore, fish protein-based food is relatively nutritious and safer than carbohydrates for human body. A method was developed for producing powder from fish having protein content ranged between 80-90% (dry basis). Then, the value-added fish cookies and snacks (viz. biscuit, chanachur & chips) were made from fish powder containing 30-40% protein. Major portion of fats were removed from fish flesh which protects the products from fat oxidation. Bacterial population of the developed products were found ranged between 1.3×10^3 to 2.4×10^3 CFU/gm. The present invention reveals that if we can add the fish protein to produce the cookies and snacks like biscuits, chanachur and chips it would be safer for health with helping in balancing blood sugar and detoxing the liver.

Keywords: fish flesh powder, cookies, nutritious, low-cost, value addition

Graphical Abstract: