

DEVELOPMENT OF TOMATO
(*Solanum lycopersicum*) INCORPORATED

FISH NUGGETS

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by

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Abstract

Changes in consumer life styles have resulted in increased demands for ready to eat and ready to cook sea food products. Fish nuggets are kind of formed meat product in ready to cook form. Also tomatoes are a fruit which has a good antioxidants effect. This study was conducted to develop tomato incorporated fish nuggets with high levels of antioxidants. Tomatoes are highly perishable easily spoiled; boiling, steaming and microwave cooking were carried out to select the most suitable heat treatments. Among the heat treatments, the best heat treatment for tomato paste was found out by the sensory evaluation and keeping quality tests. Then basic formula for fish nuggets was selected by the sensory evaluation. Finally heat treated tomato paste was incorporated into fish nuggets at 0%, 5%, 8%, 12% and 15% (w/w) levels in basic formula. Sensory qualities of 12% (w/w) tomato incorporated fish nugget sample was significantly ($p < 0.05$) higher in organoleptic characters (appearance, color, taste, texture and overall acceptability) than other samples. pH value of tomato incorporated fish nugget was significantly ($p < 0.05$) lower than the control sample, whereas, water holding capacity of tomato incorporated fish nugget was significantly ($p < 0.05$) higher. During microbiological and proximate analysis tomato incorporated fish nuggets were in the acceptable level. This new product will have special value due to the functional additive lycopene in tomato paste and it can be commercialize.

Keywords: Fish nuggets, Tomato, Heat treatments