Available online www.jsaer.com

***Journal of Scientific and Engineering Research*, 2021, 8(12):106-108**

Research Article

ISSN: 2394-2630
CODEN(USA): JSERBR

Sensory Properties of Fish Onion Rings Cooked with Different Cooking Methods

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Abstract In this investigation, it was aimed to onion rings of generate using Trout fillets (*Oncorhynchus mykiss*). Into the dough the onion rings dough, corn flour, wheat flour, salt, fish meat, cold water and onion were added. Then, stirred with mixer until a homogenous mixture was obtained. This dough mixtures was used a apparatus to onion ring shape, the fish onion rings for texture was applied in the freezing form for at least 2 days. As a cooking method, 2 different groups were formed by applying 2 different cooking methods, namely baking in the oven and cooking in hot oil. The sensory properties (of appearance, odor, color, flavor, crispiness and general acceptability) of the samples were obtained. At the and sensory analysis of fish onion rings, experimental samples prepared with cooking of deep oil received the highest rating points from the panelists aganist the other experimental onion rings samples.

Keywords Fish onion rings, *Oncorhynchus mykiss*, fast food, sensory properties, different cooking methods

Introduction

The snacks known as "Snack Food" in the entire world are broadly consumed. The onion rings are quite a popular of snack food coated [1]. The Onion is a widely used vegetable in all worldwide [2-3]. The onion is generally as raw; however, some of amount a small of onions available at sales points are treated in various ways [4]. Foods as onion rings can be easily and conveniently cooking in boiling oil or in oven heating [5]. The nutritive quality of fish very valuable for our vital activities [6-7]. It is imagined that it would be worth to enrich these inventions added with nutritional fish meat since this products are consumed at high rates today [8]. But, There is very limited to data relevant to evaluation of added with fish nutritional meat of onion rings can be found among studies.

The study aims to determine in sensory characteristics of samples cooked methods as baking in the oven and cooking in hot oil of fish onion rings containing meat of *Oncorhynchus mykiss* in Turkey.

Material and Methods

Within this study, *Oncorhynchus mykiss* were receipted from fisheries in the Keban Dam Lake in Pertek region. The all fishes were moved to the laboratory in the Pertek Vocational College in ice with polyurethane carriage boxes. Fishes were operated in the same day. Then, fillets were prepared and they were rinsed in cold water with 5% salt-water. Finally, they were ground in blender for 10 minutes.

Creating of fish onion rings

Fish onion rings were produced according to the method reported by Karaton Kuzgun [9]. It is in down as ordered of fish onion rings process:

1. Supplied fish and the fish were made into fillets.

2. Fish filets were kept in 5% cold salt solution for 10 min, which was made into mince.
3. The mixture was added minced onion (minced fish meat, wheat flour, corn flour, salt, water) (Table 1.).
4. The mixture was mixed using a mixer until a homogenous mixture was obtained.
5. After the mixture was formed as the shape of the onion ring by the dough shaping apparatus. the fishy onion rings was applied in the freezing form for at least 2 days.
6. Frozen fish onion rings were covered first flour. Lastly panko or breadcrumbs and followed by egg.
7. Cooking in the hot oil (1-1.5 minutes at 150-190 °C).
8. Cooking in the oven (20 minutes at 180°C)

Table 1: Ingredients of fish onion rings

	Minced Fish meat(g)	Minced Onion(g)	Wheat Flour(g)	Corn Flour(g)	Salt (g)	Water (mL)
Fish Onion Rings	180	350	180	50	20	220

Sensory Analysis

Five experienced panelists were academic staff trained in sensory descriptors for the samples. were evaluate in terms of appearance, odor, color, flavor, crispiness and general acceptability of the fish onion rings (9-Very Good to 1—Very Bad) [10].

Results and Discussions

The samples of onion rings applied different cooking were also evaluated by participants in terms of crispiness, appearance, color, odour, general acceptibility and flavour (Figure 1). When sample cooking with two different methods of onion rings were evaluated by panelists in terms of their appearance, the highest score was given to samples from group Hot oil cooking (9.00±0.00), the lowest score was given to the samples from Oven cooking group (7.60±0.49) (Figure 1). As it is seen from Figure 1, in sensorial analysis for their odor of samples, in the two groups were given 9.00±0.00- 7.60±0.49 score. When the fish onion rings prepared with two different cooked methods were examined in point of color, they were found to have values of 9.00±0.00- 7.60±0.49 points. When fish onion rings evaluated in terms of flavor, they were the most loved group the hot oil cooking's. As it is seen from Figure 1, When fish onion rings evaluated in terms of crispiness of samples, the hot oil cooking's of experimental samples by participants were had the highest score. The values of Karaton Kuzgun [9] is similar to the ours values determined.

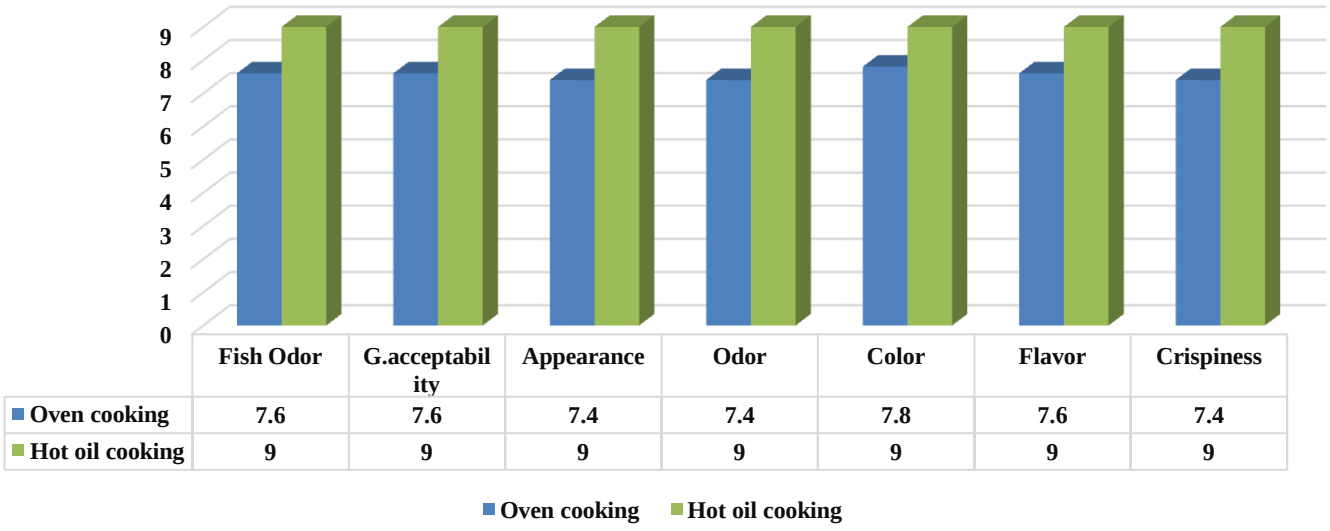

Figure 1: Sensory Properties of Onion Rings Prepared with Different Cooking Methods

Conclusion

In the light of all these data; we have come that the onion rings prepared processing with add of fish meat, which can be present and market offered to the consumer as fish onion rings of prepared with different cooking methods fondly consumed for in our consumer. Additionally, It has come to the idea that fish onion Rings groups prepared with hot oil cooking's will be more appropriate to consume in terms of sensory analyzes.

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