

## Consumer Acceptability Of Stored Frozen Fish (Short communication)

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### Abstract

Assessment of the level of cold-storage flavor development and of toughening of frozen fish by an expert panel does not necessarily reflect the acceptability of the fish products to consumers. The estimation was made by an organoleptic exam and the conclusions showed that the consumers were more influenced by the image than the products intrinsic quality.

**Keywords:** acceptability, cold-storage flavor, frozen fish

### 1. Introduction

In this paper the degree of acceptability of the following frozen products was assessed: tuna sticks, tuna file, file cod glaztick, tuna pane, glazed tuna file cod pane, regarding the final consumer and a group of experts. The estimation was made organoleptically.



### 2. Material and methods

The raw materials used. The raw materials use in the experiments were assured by the firm SC Piscicola Tour SRL and consisted of tuna products (*Gadus maruha*) that had the following characteristics from table 1:

Table 1

Nr crt.	Commercial name of the species	Scientific name	Size category	Length in cm.minn.	Weight in kilos
1.	Tuna	<i>Gadus maruha</i>	-	20	0.250

### 3. Results and discussion

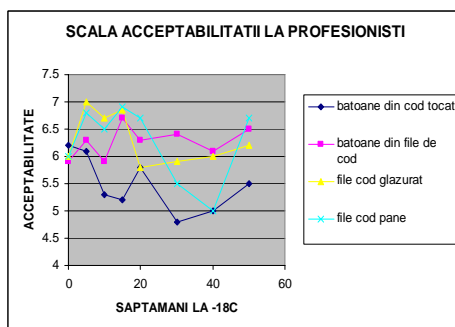
Assessment of the level of cold-storage flavor development and of toughening of frozen fish by an expert panel does not necessarily reflect the acceptability of the fish products to consumers.

In a study conducted by 25 instances the validity of the fish products, pane tuna, a glazed tuna, tuna sticks and file tuna sticks has remained almost unaltered after one year at  $-180^{\circ}\text{C}$ . Whereas a study conducted by our five experts (Prof.dr ing. Tofan Ioan, ing. Mitrenca Nicolae, ing. Mitrenca Mihai and two authorized experts from SC ECO DANUBE SRL) detect significant growths of the flavor and roughness which appear at the freezing process. However the consumer table was not at all influenced by this fact. They were rather influenced by the presentation form of the fish preferring the tuna fish file fingers to fish

fingers. Between the fish fingers and the glazed file there were few differences noticed after 12 months despite the fact that the glazed file alters most in time.

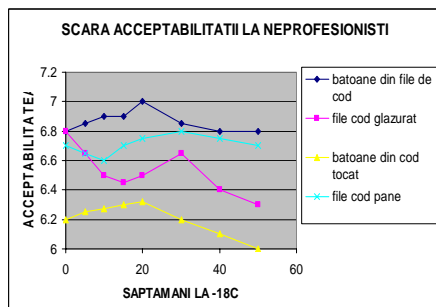
**Table 2**

Weeks	0	5	10	15	20	30	40	50
Tuna fingers	6.2	6.1	5.3	5.2	5.8	4.8	5	5.5
File tuna fingers	5.9	6.3	5.9	6.7	6.3	6.4	6.1	6.5
Glazed tuna file	6	7	6.7	6.85	5.8	5.9	6	6.2
Pane tuna file	6	6.8	6.5	6.9	6.7	5.5	5	6.7



**Figure 1**

Consumer acceptability of frozen fish products according to various professionals: 1 = very unpleasant; 5 = doesn't like or dislike; 9 = very pleasant



**Figure 2**

Consumer acceptability of frozen fish products according to various unprofessionals: 1 = very unpleasant; 5 = doesn't like or dislike 9 = very pleasant.

**Table 3**

Weeks	0	5	10	15	20	30	40	50
File tuna sticks	6.8	6.85	6.9	6.9	7	6.85	6.8	6.8
Glazed tuna file	6.8	6.65	6.5	6.45	6.5	6.65	6.4	6.3
Tuna fingers	6.2	6.25	6.27	6.3	6.32	6.2	6.1	6
Tuna file pane	6.7	6.65	6.6	6.7	6.75	6.8	6.75	6.7

#### 4 .Conclusions

As a conclusion it is clear that the visual impact of the final product is more important to the consumer than the actual qualities of the product but this fact cannot influence the struggles of the professional to obtain a product with high nutritional value and excellent quality.

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