

# PUBLIC SCREENING TO ASSESS TODAY'S FOOD CHOICE IN GERMINATED SEEDS

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**Abstract:** To get the actual status of people understanding and acceptance of “healthy foods” and these products status on the market we test the public reaction to simple wheat flakes and musli. This test was accomplished by means of a public screening between the consumers. At the end of it, hedonic tendency in food choice was clearly demonstrated. The musli product was appreciated more than the simple flakes, so 5% of the persons questioned found simple flakes to be excellent whereas 46% of the persons questioned found musli to be excellent. Lack of “sugar” and aroma were the main critics brought in case of simple flakes by the majority of respondents. This shows the lack of interest for the nutritive aspect. Now more than ever it is in consumer's habit to judge products by their look and taste rather than the healthy aspects.

**Keywords:** food, seed, germination, flake, musli

## INTRODUCTION

Today's foods are the result of laborious processing process involving intense refining, concentrating and conserving. Food stuff has a high chemical content, bearing the footmarks of the intensive agricultural system. At present, thanks to improved work conditions, through mechanization and automation, physical effort is more reduced while stress and intellectual efforts change to superior levels. Pollution also has multiple and unpredictable effects on the human organism (Antoine, 2000). Considering all these, many researches indicate that nutrition did not evolve in

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accordance to the new day-to-day life. Nutrition is presently a major risk factor in diseases like obesity, atherosclerosis, allergy, diabetes, immunodeficiency, osteoporosis, cancer etc. (WHO, 2004) (Wandel, 1994). Optimization of food ratio with the new physiological necessity of modern man makes necessary the developing of a new orientation in nutrition with an accent on improving nutritional quality of food ratio. The modern tendency in food industry is to create products that protect the organism. These kinds of products have, in relative high concentration, some naturally occurred biologically active compounds providing health benefits for the consumers (Costin and Segal, 1999). Germinated seeds and products from germinated seeds are included in this category.

Germination is the most efficient way to add value to the whole seed. Seeds are real nutritional concentrates but the digestibility of the nutrients is in many cases low. By germination, is achieved an important growth of nutritive value to the seed (Segal, 1993).

In this work, we test the public reaction on two well known products, simple wheat flakes and musli, both obtained with germinated wheat seeds.

The questionnaire presented in this paper was used to find out consumers opinion.

## **MATERIALS AND METHODS**

### **Materials**

Two products were tested:

- wheat flakes, without any adder ingredients;
- musli with dry fruits, nuts, chocolate flakes, sweetener and flavors.

Both products were obtained from two days germinated wheat, dried at 30-35<sup>0</sup>C in order to prevent the degradation of thermosensitive components, and flattened.

### **Methods**

The poll was made in February 2005 on 500 subjects chosen from the clients of two major mega market chains present on the Romanian market. The group of subjects was considered on the criteria: age, sex and profession. Each participant responded to a standard type questionnaire presented in figure 1.

|               |   |                                |                                |                                  |
|---------------|---|--------------------------------|--------------------------------|----------------------------------|
| Age category: | under 20 years <input type="checkbox"/> | 20-40 <input type="checkbox"/> | 40-60 <input type="checkbox"/> | over 60 <input type="checkbox"/> |
| Sex:          | F <input type="checkbox"/>              | M <input type="checkbox"/>     |                                |                                  |

|   |                                 |  |                                  |                                       |
|---|---------------------------------|--|----------------------------------|---------------------------------------|
| How do you appreciate the taste of the product? | Bad<br><input type="checkbox"/> | Satisfying<br><input type="checkbox"/> | Good<br><input type="checkbox"/> | Excellent<br><input type="checkbox"/> |
|---|---------------------------------|--|----------------------------------|---------------------------------------|

Suggestions and comments: .....

|  |  |                                |
|--|--|--------------------------------|
| Did you buy this kind of product before?   | Yes <input type="checkbox"/>           | No <input type="checkbox"/>    |
| Do you intend to buy this kind of product? |  |                                |
| Today <input type="checkbox"/>             | In the future <input type="checkbox"/> | Never <input type="checkbox"/> |

Figure 1. Standard type questionnaire used to test the consumer's opinion on the two products.

The answers to questions “Did you buy this product before?” and “Do you intend to buy this kind of product?” addressed to all subjects (except underage ones) give as a clue of the market position of those products.

## RESULTS AND DISCUSSION

The following results were obtained:

For simple wheat flakes:

- 5% of the persons appreciated the taste to be excellent;  
39% of the persons appreciated the product as being good;  
42% of the persons appreciated the product as satisfying;  
14% of the persons were reserved to consuming the product.

For the musli product:

- 46% of the persons appreciated the taste to be excellent;  
27% of the persons appreciated the product as being good;

24% of the persons appreciated the product as satisfying;  
3% of the persons were reserved to consume the product.

The poll results are presented graphically in figures 2 and 3.

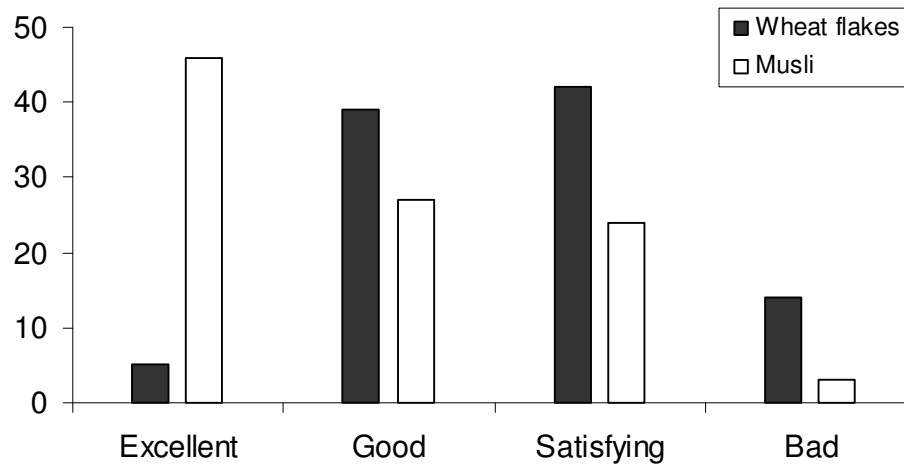


Figure 2. Poll results regarding sensorial qualities of wheat simple flakes and musli.

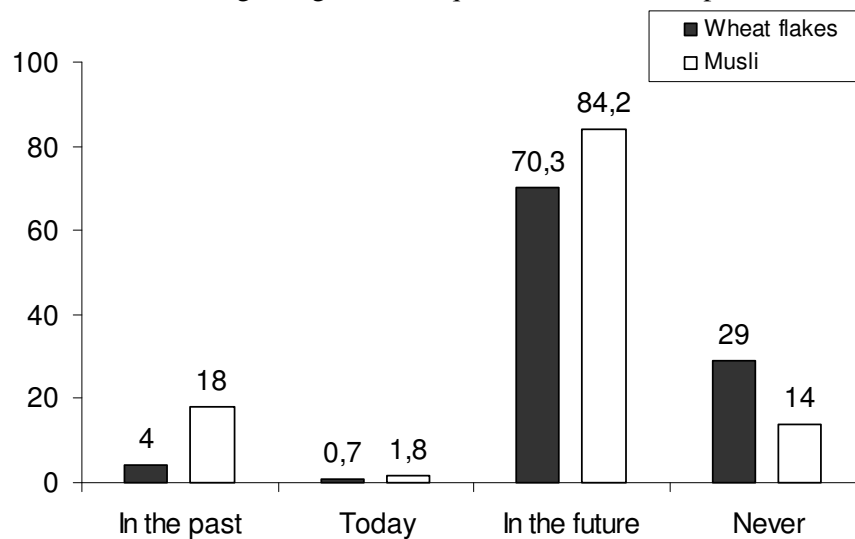


Figure 3. Poll results regarding consumers' intension to buy.

The musli product was more appreciated than the simple flakes, mainly because of the sweeter taste. Lack of “sugar” and aroma were the main critics brought in case of simple flakes by the majority of respondents.

The category under 20 years of age appreciated more the musli product, having more radical opinions about simple flakes. Regarding the other age categories, opinions were more homogenous; products being seldom characterized as bad. Women generally were more open to both products.

From the 500 questioned subjects, in the case of flakes, three persons manifested the intention to buy, 29% said they would never buy it and the rest said they would buy it in the future. In the case of musli, eight persons manifested the intention to buy, 14% said they would never buy it and the rest said they would buy it in the future. Only 4% of the participants bought simple wheat flakes and 18% of them bought musli.

## CONCLUSIONS

It is clear that the hedonic tendency in food choice is now more than ever the principal criteria. It becomes a habit for the nutritive aspect to be left behind, even though this is not the healthiest thing to do. Germinated seeds and different products based on germinated seeds are well known in many countries, but the market is far away from its real potential. The actual status of protection food industry based on germinated seeds is the education of the population regarding the benefits, food use and impact on health. Worldwide the number of species used for these aims is rapidly growing and so is the number of products in which they can be used as components or as bases.

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