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PERCEPTION OF UNCONVENTIONAL FOOD BY CONSUMERS IN THE AGE GROUP OF 50–60 YEARS OLD

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Abstract: The aim of the study was to assess the perception of unconventional food by respondents in the 50+ group. The research tool was a questionnaire developed by the first author that included questions about the definition of unconventional food, factors determining purchase and consumption, and identification of specific unconventional food products. Unconventional food involves products from a geographical range that is different from the climate zone where the consumers reside. The results from the survey indicated that respondents lacked adequate knowledge about unconventional food. Indeed, most female respondents also believed that unconventional food was a health hazard. Of note, the results indicated that men in the 50+ age group knew more about unconventional food than female respondents. Further research should focus on sources of knowledge about unconventional food and possible ways to encourage incorporation of these products into diet among the 50+ age group.

Keywords: unconventional food, perception, 50+ years old consumers.

1. INTRODUCTION

Results from studies focused on new products on the food market indicate that the level of acceptance is strongly associated with the age of respondents [Jeżewska-Zychowicz 2007, 2009]. Knowledge and curiosity about new nutritional trends characterize consumer populations in age ranges up to 40 years. Consumers over the age of 50 show less confidence in food that has not been traditionally encountered within their diets. This applies to both new forms of food and raw ingredients used for food production. Respondents surveyed about their food-related views usually consider products enriched with probiotic strains or GMO foods as unconventional foods [Babicz-Zielińska 2006, 2010]. While there is much research on consumer attitudes to genetically modified food, issues related to knowledge about unconventional food are scarcely reported in the literature. Unconventional food is defined as food characterized by a unique technology or

origin from different geographical area. The aim of this study was to assess the knowledge and attitudes towards unconventional products of plant origin by a group of consumers aged 50–60.

2. RESEARCH METHODOLOGY

This evaluation employed survey questionnaires created by the author. The questionnaires consisted of five multiple-choice questions and one open-ended. Questions included in the survey concerned the definition of unconventional food, factors determining consumption and purchase, and identification of this type of food products by the respondents. One question also asked about the health benefits of unconventional food. The goal of this question was to determine the knowledge of respondents about products defined as unconventional food. The surveyed population was 25 respondents, women and men aged 50–60 years old. The sample in this study was not randomly selected. Respondents were reluctant to participate in the survey or did not respond to all questions, which determined the size of the sample.

The study sample consisted of people between 50 and 85 years of age, 40% were people over 50 years of age and 28% of respondents were 60 to 70 years old. Respondents who were over 70 and 80 years old constituted 24% and 8% of the sample, respectively.

3. RESULTS

The basic question of the survey concerned the ability to define unconventional food by older respondents. For easier understanding of the content, the question was specified in a way that indicated the composition, technology of acquisition, and origin of products.

Respondents, to a large extent, showed good intuition regarding the definition of unconventional food. Half of the male survey respondents understood that the concept of unconventional food is associated with a different technology or composition (Fig. 1).

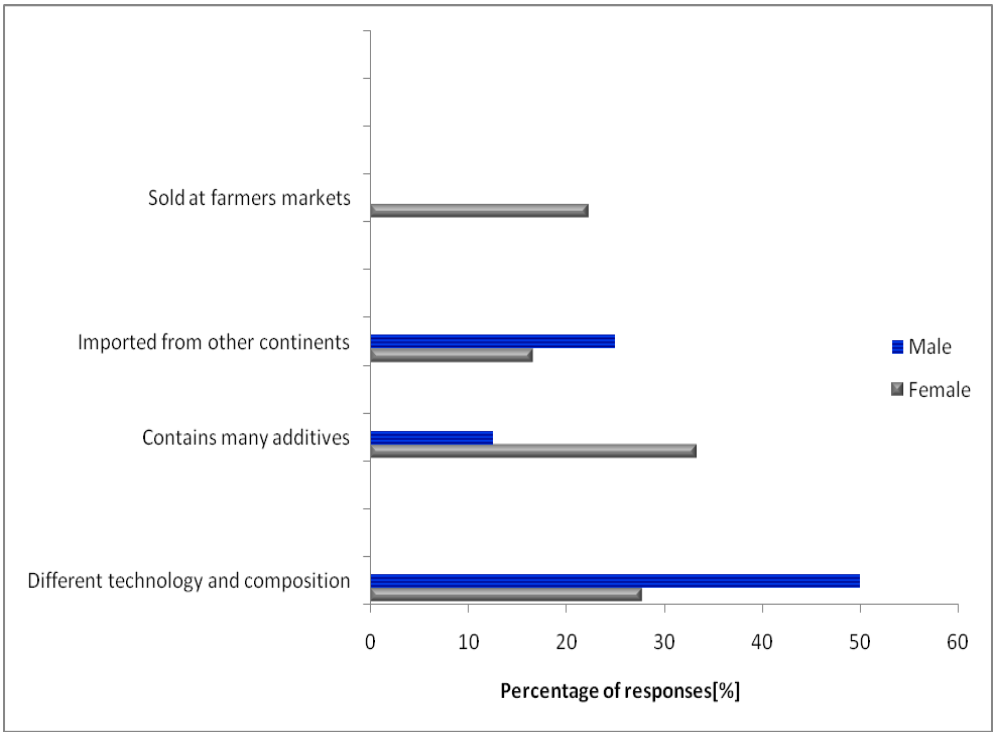

Fig. 1. Definition of „unconventional food"

Over 20% of all women identified this food as being sold at farmers markets. One-fifth of the respondents correctly defined unconventional food, indicating that this type of food includes products from other geographical zones (Fig. 2).

According to a dozen or so percent of respondents, unconventional food is one that contains unusual additives. Nutritional value was also mentioned by the respondents as a factor that differentiates both types of food. Nutritional value was distinguished by 27.7% of all women and 50% of all men. Relative to women, twice the percentage of men surveyed indicated the country of origin of products as a factor differentiating unconventional products. Flavor was mentioned by 43.7% of all women as a characteristic of unconventional food. This answer was not mentioned by any male respondent (Fig. 2).

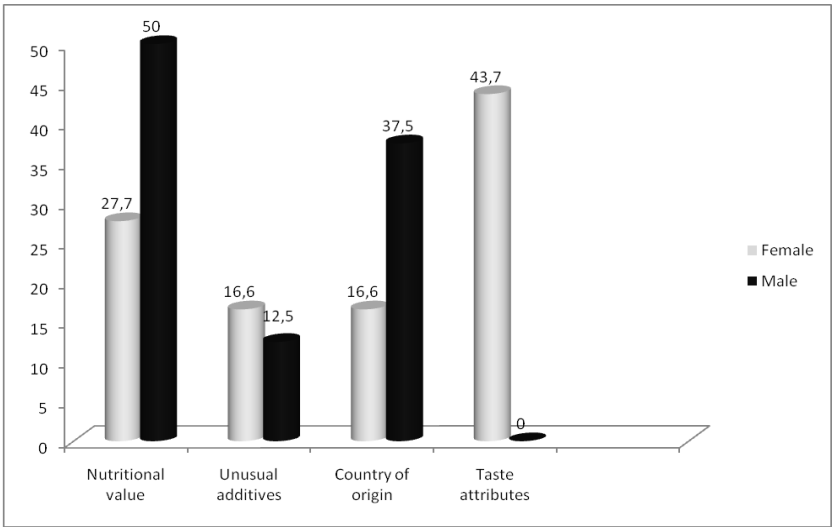

Fig. 2. Factors differentiating traditional food from unconventional food

The question regarding shopping for traditional and unconventional food revealed that both types of purchases are more often made by women. Over 40% of all women indicated this purchasing structure. However, purchases of unconventional food were more often made by men. Indeed, 87.5% of all men surveyed had decided to buy unconventional food in the past (Fig. 3).

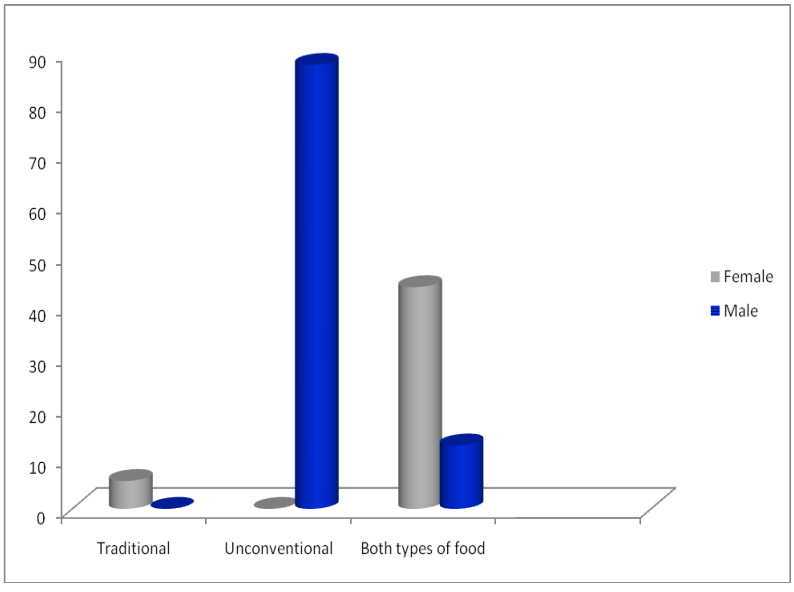

Fig. 3. Type of food purchased

The results from the analysis showed that the most common factors determining the purchase of unconventional food were organoleptic features such as appearance, as indicated by men, and nutritional value, as indicated by women. 22.2% of all women and 12.5% of all men indicated taste and smell. Curiosity determined the choice of unconventional products by 12.5% of the women respondents. Fashion for unconventional food and its appearance were less frequently indicated as factors determining choice by women and were ranked in fourth and fifth place. Fashion was not a factor in the choice of unconventional food among any of the surveyed men (Fig. 4).

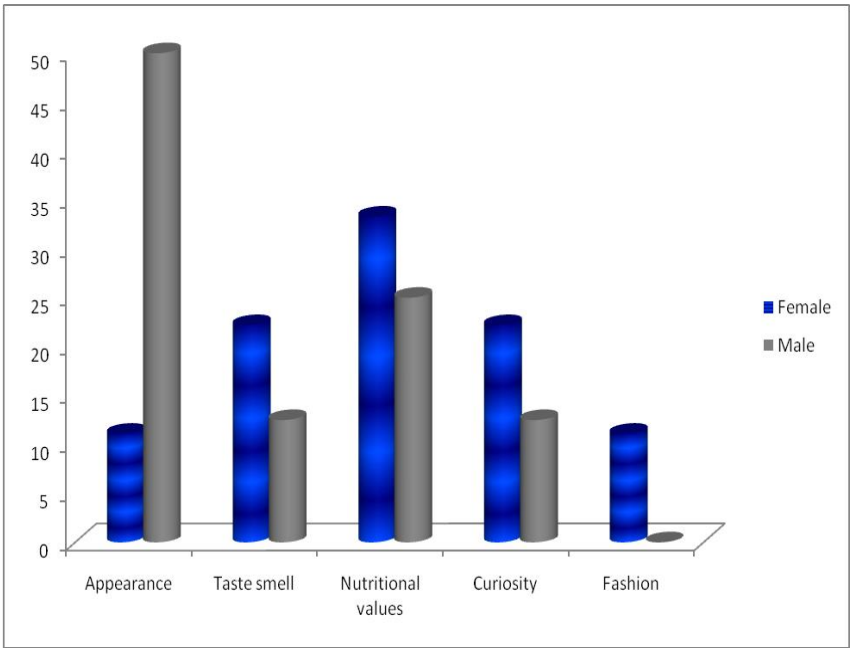

Fig. 4. Factors determining the choice of unconventional food

Most of the women surveyed believed that unconventional food was a health hazard. Over 50% of the respondents expressed this opinion. 62.5 % of all men had no opinion on this subject. 30% of all men and 40% of all women said that unconventional food is safe. 12.5% of all the male respondents presented a similar view on the safety of this food (Fig. 5).

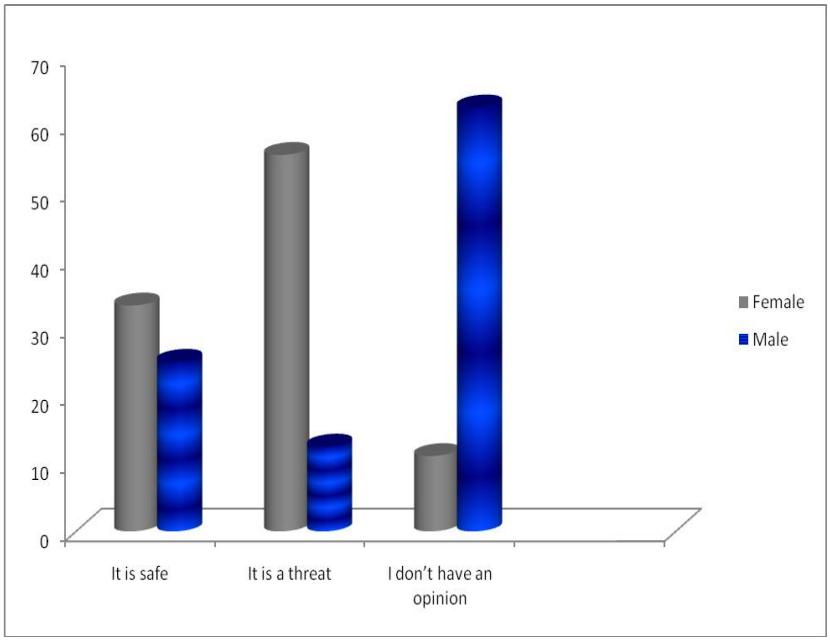

Fig. 5. Unconventional food safety assessment by respondents

The last question in the survey asked to designate unconventional food products. Only passion fruit and pomegranate were recognized by a few percentage of respondents as unconventional products. This choice was made by only 8% of all men in the case of passion fruit and 6% in the case of pomegranate. All respondents, both women and men, recognized mango as a traditional product. All male respondents and almost 90% of all women considered nightshade and passion fruit to be unconventional. Most respondents identified plant produce as unconventional. The exception was guava, with about 50% of respondents considering it to be a traditional fruit.

Notably, less popular plant materials such as the bellworm, nightshade, tuna, kumquat or passionate were recognized by the respondents as unconventional foods. This opinion was expressed by 93 to 100% of all male respondents and from 89 to 94% of all female respondents. Wasabi was also considered unconventional food by 89% of all men and 58% of all women (Fig. 6).

Due to an increasing number of new products appearing in the market-place, knowledge of their properties and quality is important for consumers. Unconventional food ingredients may be a source of microflora that affects consumer health. In previous years, research results confirmed the high degree of acceptance of new forms of food among young recipients. Respondents who did not know the organoleptic features of the products indicated willingness to buy such products. However, research by Babicz-Zielińska et al. indicate that the

phenomenon of neophobia does not characterize a homogeneous population of respondents.

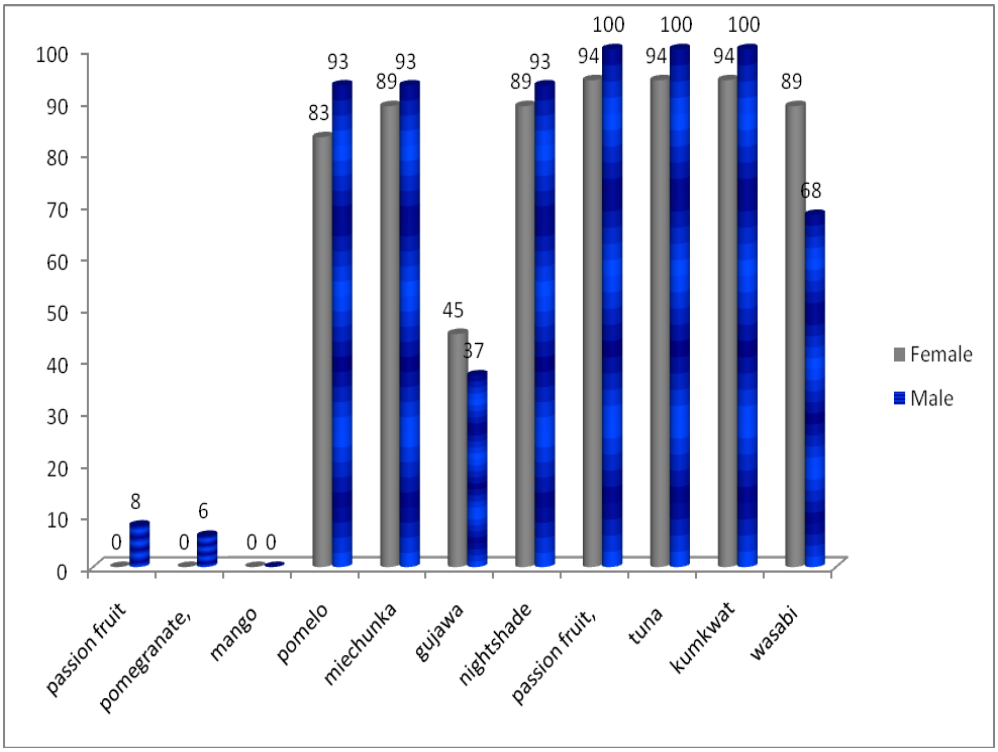

Fig. 6. Identification of plant raw materials as unconventional food

4. DISCUSSION

Knowledge about unconventional food varies among women and men aged between 50 and 60 years old. Considering that unconventional food is defined as food products from geographical areas different from the geographical area of the consumers, the ability to define such food by the respondents turned out insufficient. Although respondents correctly indicated many unconventional products, results from this study have revealed that habits and long-term presence of certain products on the market translate into misidentification of such products, for instance – mangos.

In the 50+ age group, men showed a better knowledge of unconventional food than women. Responses from female respondents appeared to be based on intuition rather than specific knowledge. This could be due to less interest in information transmitted on the Internet, or their deriving information from other unprofessional

sources. The survey did not include questions about source of respondents' knowledge, which would be an important topic for further research.

Considering the way the respondents defined unconventional food and assume its health-promoting values, answers to questions about consumer safety indicated lack of knowledge among the respondents.

Results from the analysis also showed that the 51–60 age group did not appropriately recognize and was not knowledgeable of unconventional food. This may, in part, contribute to diets deficient in ingredients rich in healthy properties. Some believe that food from a distinct geographical area may have negative effects on the consumer, especially consumption of fruit grown in tropical climate during wintertime. This might be one of the reasons why unconventional food lacks popularity among older population. Incorporating unconventional plant materials is of particular importance for enriching diets in the temperate climate. This is not a unique trend. The results from this study of attitudes towards unconventional foods among the 50+ years old sample of respondents resemble prior research results.

Results from other studies have shown a positive attitude of young respondents to products with unusual additives, indicating that respondents associate unconventional food with these properties of food. As many as 42% of all women between 20–40 years of age indicated that they have knowledge of fermented dairy products with vegetable/fruit additives from the tropical climate zone. However, only 26% indicated that they would introduce this assortment to their menu [Steinka 2009].

Analysis of the obtained results showed that about 16% of all older women associated unconventional food with additives, which is noticeably different from the views of the population between 20 and 40 years of age. Research conducted several years ago showed that the purchase or consumption of unconventional food by the 20–40 age group was acknowledged only by 14.2% of all respondents, while 25% of all respondents have never consumed or bought unconventional food [Steinka 2009]. Youth respondents, however, did not provide any answer to the question "how is unconventional food different from traditional". Only 2.1% of all respondents indicated that the difference may be associated with the health-promoting properties of the listed products. A small percentage of respondents mentioned sensory features, and 15.3% of all respondents said that the difference between unconventional and traditional foods lies in the longer shelf life of the former. Few respondents (5.2%) said that this type of food has better taste [Steinka 2009]. Studies of younger groups showed that 75% of all respondents accepted selected unconventional products in their diet, whereas 18.1% were undecided about this matter. Moreover, 6.4% of all young respondents would not accept foods enriched with unconventional additives in their diet.

Research dating back to 2007 indicated that in groups between 26 and over 55 years of age, respondents buy when most friends have already acquired and rated

positively. The highest level of neophobia was found in the sample of 46 to 55 years old respondents. Consumers in the group of 36–45 years old showed the highest degree of innovation [Jeżewska-Zychowicz 2007]. Young consumers choosing between traditional and exotic food, to a small extent, chose the latter. Herein, 15.9 to 23.9% of the respondents chose this food depending on whether they were products of animal origin (e.g., frogs legs) or vegetable origin (e.g., tofu) [Jeżewska-Zychowicz 2009]. Research conducted in 2011 on a group of young respondents showed that 11.8% of the respondents considered unconventional food as dangerous, while 62.3% did not express their opinion on this topic [Steinka and Kukułowicz 2011].

Research shows that acceptance of a new product is hindered if the expected difference between the known and the new product does not cause a strong emotional relationship [Jeżewska-Zychowicz 2014]. Literature data indicate that social factors and the so-called 'context' are the most important determinants of food choice [Babicz-Zielińska and Jeżewska-Zychowicz 2015].

Among the elements of social life that decide upon the choice of food by consumers are: family, peer group, opinion leaders and influencer groups. Education is also one of the elements related to consumer choice. The context is defined as time, place and companions of food consumption, which also involves biological factors.

The results from the current study of the 50+ respondents seem to confirm that social determinants were the main factors in the responses presented by women, as demonstrated by choice of food products based on fashion. Men's perception of unconventional food is, in contrast, likely linked to biological factors. For example, men pointed to organoleptic values when choosing unconventional food to a greater extent than did female respondents.

5. CONCLUSIONS

1. Results from the current study among the 50+ age group appear to confirm that food choice is determined by social factors and “context”.
2. The respondents were from cities over 200.000 as well as from smaller towns and villages. This could be the reason for “context” playing a key role in the obtained results.
3. However, due to the large age spread of the studied sample (50–85), it is difficult to draw clear conclusions from the results of the study. Future research would benefit from expanding of the sample and inclusion of respondents in specific age ranges.

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