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Young Consumers' Perception of Food Quality: An Illustration from Greece

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Abstract: Food quality is becoming an increasing important factor in consumer's buying decision making, especially after serious safety issues appeared recently in the European Union. The need of standards to assure food quality and safety is evident from literature. The present study explores young consumers' perceptions of food quality. It presents the outcome of a field research undertaken from October 2002 to January 2003. A convenience sample of 582 higher education students aged between 18-23, living away from their homes, in Greece, was employed. Statistical analysis included frequencies, percentages, means, factor analysis, reliability and cluster analysis. The findings from this study are discussed, which are considered to be relevant to marketing practitioners and policy makers for designing appropriate marketing strategies in order to attract and satisfy these segments of young consumers. Lastly, suggestions for further research are presented.

Keywords: Consumer behavior, food quality, public policy, marketing, field research

1. Introduction

Food products come in an unlimited variety and are described by a large number of characteristics or attributes. These attributes are associated with food choice, which is a major component of the purchasing decisions made by consumers [17], [24]. Quality of a food is a characteristic wanted by a consumer in order to purchase it [21], but little is known about consumers' definition of food quality since it is a multi-faceted issue [6], [33] and is considered one of the most problematic areas in the study of consumer behaviour [17].

The definition of food quality is a subjective matter, differing from person to person. There are some standard definitions of food quality, i.e. from the International Organization of Standardization, or the German Association for Quality [32], which are rather similar and state that quality is the features and characteristics of a product, which is able to satisfy, stated or implied consumer needs. In reality though, on an individual basis there will be many different definitions of the term. These definitions depend upon the predictions of the individual consumer, as well as on the background of the person using this term, and it may also differ even for the same person in different circumstances [32], [4].

In order to understand food quality, consumers' use of the word quality must be investigated, both as a concept and as characteristics of a product [6], [32]. Food quality is related to terms of perceived food quality, a perception process that has a different content for various persons [35]. Perceived quality is related to the product's ability to provide satisfaction [31] as well as a consistent level of the properties of the product [36], [34].

Kupiec and *Revell* (2001) states that a "quality attribute" is defined as a product feature (tangible or intangible) which influences quality perception directly upon consumption and a "quality cue" is a product feature influencing consumers' expectations of product performance. Quality cues can be intrinsic or extrinsic and are used by consumers to form more abstract beliefs about the quality of a product [4]. Intrinsic cues are those that are part of the physical product, such as colour, aroma, taste, etc. Extrinsic, are those cues that are related to the product but are not physically part of it, such as price, brand name, country of origin, etc. [35].

Since food quality is a clearly subjective matter and is related to perceived quality, this paper focuses on students' perceptions of food quality and specifically on quality of fruits. Also, satisfaction is directly related to satisfaction from food quality; so this study has four specific objectives which are to be investigated:

- Which attributes or cues are perceived to describe food quality, and especially fruit quality?
- The level of satisfaction from fruit quality.
- The factors defining satisfaction from fruit quality.
- The implementation of a first level market segmentation based on the factors derived.

To address the above issues, a research approach based on two axons was undertaken as presented in the next section. Followed by the presentation of the research findings, the discussion and conclusions derived from the research. This paper concludes with the limitations and suggestions for further research.

2. Methodology and research design

2.1. Qualitative Research

Following marketing literature on consumer behaviour and in view of the exploratory nature of this study, we opted for qualitative research [16], [30]. Qualitative research allows us to fully explore and probe consumers' way of thinking about a certain subject, and why they think what they do [10]. Thus, qualitative research allowed us to explore what students perceive as components of food quality and specifically for fruit quality. Also, it enabled us to generate statements, which could subsequently be used in the field research. For this to be achieved discussions in three focus groups were conducted; one from each university where the final research would take place. In the focus group discussions twenty-one students participated in total. Students were asked to consider the quality attributes or cues of food and especially of fruits. Through the focus groups, a total of fourteen quality attributes and cues were derived. These quality attributes and cues were: Freshness; texture; nutritional value; aroma, colour; taste; appearance; place of origin; way of production; price; free of hormones; free of insecticides; free of pesticides; and quality certification. These quality attributes were continuously used for the development of the field questionnaire.

2.2. Questionnaire development

For the purpose of verifying the above objectives, a structured questionnaire was prepared. The questionnaire was developed specifically for this purpose based on a literature review [17], [4], [24], [27], the results of qualitative research and the objectives of this study. It was comprised of 38 questions and was divided into five parts:

- Shopping behaviour
- Product certification
- Food quality attributes
- Information cues and
- socio-economic and demographic questions

Only the variables pertinent to the present analysis will be discussed. It is noted that satisfaction was rated on a seven –point scale where 7 equalled "totally satisfied" and 1 accounted for "totally dissatisfied".

After the questionnaire was developed, it was tested for content validity [23], [8] and face validity [5], [1]. Following, a pilot study was conducted with an aided self-administrated questionnaire on a sample of 120 students (convenience sampling), which were excluded from the final research [29], [19].

2.3. Field research

The empirical research was conducted by using the modified questionnaire in the final sample of this study. In the present study, the convenience sampling technique was employed with aided self-administrated questionnaires [26]. The sample size for the intent and purposes of this study was 582 (n=582), sample significant enough for the statistical analysis performed [25]. The sample consisted of students from the three Universities (University of Thrace, Technological Educational Institute of Western Macedonia, and Technological Educational Institute of Thessaloniki). Data was collected during the period October 2002-January 2003.

2.4. Data analysis

The statistical package SPSS ver. 10.0 was used for the data analysis. Statistical analysis of the survey data included descriptive statistics (frequencies, percentages and means), factor analysis, reliability analysis and K-means Cluster Analysis for the satisfaction scale from the fruit quality variables.

3. Results

3.1. Sample Profile

The sample comprised of university students aged between 18 and 23. From the 582 respondents participating in this research, 39% were males and 61% females. The majority of the respondents (43.2%) had personal monthly net income up to 300 euros. All the students were single and the vast majority (75.2%) worked on a part-time basis.

3.2. Components of Fruit Quality

All components mentioned in the questionnaire were considered important by students as fruit quality features (Table 1). These features are considered as quality cues, since they refer to students expectations in order for a fruit to be considered as a quality one. The entire sample (100%) regarded taste, free of hormones, pesticides and insecticides as most important, followed by the appearance of the fruit (99.8% of the sample)

Table 1. Cues considered important by students of fruit quality (%)

Quality cues	Yes	Do not Care	No
Freshness	98.2	0.8	0,0
Texture	93,5	4,3	2,2
Appearance	99,8	0,2	0,0
Place of Origin	66,6	23,4	10,0
Way of Production	89,8	8,7	1,5
Taste	100,0	0,0	0,0
Color	94,7	4,2	1,1
Aroma	96,2	3,8	0,0
Nutritional Value	72,6	20,5	6,9
Price	88,1	9,3	2,9
Free of Hormones	100,0	0,0	0,0
Free of Insecticides	100,0	0,0	0,0
Free of Pesticides	100,0	0,0	0,0
Quality Certification	94,6	4,2	1,2

3.3. Satisfaction from Fruit Quality

Satisfaction level from fruit quality rated on a 7-point scale does not seem to be very high (table 2), since the highest mean score is 5.19 for colour of the fruits. Appearance (5.13) and nutritional value (5.12) follow it. On the other hand the lowest level of satisfaction comes from quality certification (1.61), and free of insecticides (1.89).

Table 2. Satisfaction from fruit quality attributes (%)

Quality attributes	Satisfaction			Neither satisfied/ dissatisfied	Dissatisfaction			Means(St.D)
	(7)	(6)	(5)	(4)	(3)	(2)	(1)	
Freshness	12.0	18.2	41.8	18.4	8.6	1.0	0.0	5.04 (1.13)
Texture	5.2	18.4	44.8	20.6	9.5	1.5	0.0	4.84 (1.04)
Appearance	10.7	27.1	36.3	18.9	4.8	2.2	0.0	5.13 (1.12)
Place of Origin	4.3	16.7	33.3	36.6	4.8	3.3	1.0	4.65 (1.11)
Way of Production	2.8	9.0	19.0	36.1	25.6	4.0	3.6	4.00 (1.24)
Taste	10.3	26.8	34.2	15.5	10.7	1.0	1.5	5.01 (1.27)
Color	9.2	30.2	39.7	14.9	4.0	2.1	0.0	5.19 (1.06)
Aroma	8.9	27.5	29.2	20.8	11.0	1.0	1.5	4.93 (1.27)
Nutritional Value	20.1	19.2	25.8	25.4	7.4	1.5	0.5	5.12 (1.32)
Price	3.8	4.2	15.0	22.4	21.7	16.0	16.9	3.30 (1.50)
Free of Hormones	0.8	0.8	2.1	12.0	9.3	28.9	45.9	1.91 (1.05)
Free of Insecticides	0.0	0.8	1.1	11.5	13.2	28.2	45.2	1.89 (1.02)
Free of Pesticides	0.8	2.2	0.0	12.0	13.1	27.9	44.0	1.91 (1.02)
Quality Certification	0.0	0.0	0.0	5.3	6.0	32.6	56.0	1.61 (0.82)

3.4. Factor Analysis –Reliability Analysis

Factor analysis was conducted in order to identify the underlying components of fruit quality and their extent of influence on the satisfaction scale. The form of Factor Analysis used was Principal Component Analysis (PCA) with Varimax Rotation, in order to summarize most of the original information to a minimum number of factors for predictive purposes [18].

As illustrated in table 3, PCA identified three factors accounting for 60.9% of the total variance. All variables had loadings higher than 0.50 on one of these factors, illustrating a good fit. In addition, KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy, BTS (Bartlett Test of Sphericity) measure of the partial correlation coefficient and Significance (p) are reported. BTS with a value of 3347.228, p=0.000 and a calculated KMO statistics of 0.91 indicated that data was suitable for factor analysis [18], [26], [9].

Table 3. Factors consisting satisfaction from fruit quality

Factors	Quality attributes	Loading on the factor	Reliability of the factor
(1st) 28.6% of total variance	Freshness	0.722	0.8508
	Texture	0.730	
	Appearance	0.593	
	Taste	0.827	
	Color	0.677	
	Aroma	0.787	
	Nutritional Value	0.652	
	Price	0.534	
(2nd) 21.1% of total variance	Free of hormones	0.867	0.8884
	Free of Insecticides	0.922	
	Free of pesticides	0.891	
	Quality certification	0.730	
(3rd) 11.2% of total variance	Place of Origin	0.694	0.5065
	Way of Production	0.832	

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0,855; Bartlett Test of Sphericity = 3347.228; df=91; Significance =0,000 Total variance explained: 60.9% Total Cronbach's Alpha: 0.8156

Reliability analysis (Cronbach's alpha) was performed to test the reliability and internal consistency of each of the 14 quality attributes of the fruit quality satisfaction scale. The scale was found to be internally reliable (a=0.8157). This alpha exceeded the minimum standard of 0.60 suggested by Malhotra (1996), Spector (1992) and Carmines and Zeller (1989).

Specifically, eight items were identified under factor I with loadings ranging from 0.534 to 0.827. This factor interprets 28.6% of the total variance and is related to "sensory characteristics and price" (Cronbach's alpha= 0.8508).

Factor II identified four items, which had factor loadings ranging from 0.867 to 0.922 (Cronbach's alpha= 0.8884). This factor interprets 21.1% of the total variance and is related to "safety issues". Lastly, Factor III identified two items, which had factor loadings ranging from 0.694 to 0.832 (Cronbach's alpha= 0.5065). This factor interprets 11.2% of the total variance and is related to "way of production and origin".

3.5. K-means Cluster Analysis

K-means Cluster Analysis based on the three factors derived was used to identify different students segments of satisfaction from fruit quality. The criteria for the validity of the solution of K-means Cluster Analysis proposed for this research was the following: selection, as possible of a representative sample from the corresponding population [18]. Here all students took part in the research. In the first phase, application of Hierarchical Cluster Analysis in order to define a range of solutions regarding the number of clusters and estimation of their centroids [18]. Comparison of the solution with others, derived from randomly selected subsets of data [14], [28]. Comparison of the solution with others derived from application of fewer variables [20]. Lastly, other solutions with different number of clusters were examined. The three-cluster solution was selected as the most appropriate using the above criteria and having in mind that these clusters must have practical and physical interpretation [15], [12], [22]. Based on the above procedure, the three clusters derived had the following characteristics (Table 4).

Table 4. Student clusters based on derived factors comprising satisfaction from fruit quality

Factors	**F.C.C. 1st cluster** n=224	**F.C.C. 2nd cluster** n=227	**F.C.C. 3rd cluster** n=131
Sensory characteristics and price	3.89	5.43	4.47
Safety attributes	1.42	1.48	3.53
Way of production and origin	3.39	5.33	4.21

Sample: 582

The first cluster consists of 38,5% of the students. This cluster tends to be indifferent (neither satisfied nor dissatisfied) towards the 1st factor: the sensory attributes and price (FCC: 3.89), is totally dissatisfied towards the 2nd cluster: the safety attributes (FCC: 1.42), and dissatisfied towards the 3rd factor: way of production and origin. This cluster can be called the "dissatisfied consumers" since they have FCC (Final Cluster Centres) scores ranging from 1.42-3.49, tending to be dissatisfied. The second cluster consists of 39.0% of the sample. This cluster is the most satisfied cluster towards the derived factors (excluding safety attributes). This cluster has FCC varying from 1.48 to 5.33. This cluster can be called the "satisfied consumers". The last cluster consists of 22.5% of the sample. This cluster is neither satisfied nor dissatisfied from fruit quality, since the FCC varies from 3.59 to 4.27. The main characteristic of this cluster is that it is neither satisfied nor dissatisfied even towards the 2nd factor (safety attributes), where the other two clusters are completely dissatisfied. This cluster is called the "indifferent consumers".

4. Discussion

The first objective of this study was to investigate which cues are perceived to describe food quality and especially fruit quality. The evidence of this study (qualitative research) reveals that students consider 14 attributes, as the ones forming fruit quality. All features of fruit quality derived from qualitative research seem to be important when tested in the field research. These features were also found in prior studies (example: [2], [37]).

The second objective of this study was to investigate students' satisfaction level from fruit quality. Fruits are important components of a healthy diet, and their quality characteristics are important in determining consumer satisfaction. *Asp* (1999) states that food decisions made by individuals affect the healthfulness of their food intakes and influence the success or failure of food products in the consumer-oriented food marketplace of today. Satisfaction can be meas-

ured only if the product has been consumed, and for so quality features in this case are considered quality attributes. Low satisfaction level was found, implying that confidence towards quality is lost, and for so to establish it, the solution of the hormone, pesticides, insecticides, and certification issues should be of high priority for public consumer oriented quality policy.

The third objective of the study was to investigate the factors of fruit quality satisfaction. This study revealed three factors referring to satisfaction from fruit quality. The first factor is associated to sensory attributes and to price; the second factor is associated to sensory attributes, and the third to way of production and origin. Upon these factors producers, distributors, marketing staff, and quality policy makers can base their quality and marketing plans, in order to increase consumer confidence towards fruit quality and simultaneously increase consumption. One way for this to be achieved is advertisement, focusing on an information approach referring to fruit quality.

To do so, fruit cultivators and distributors must ensure that the fruits they produce satisfy consumers' demands. They must ensure the consumers that the fruit is safe to eat; it is healthy and nutritious, and it is of high quality, as quality is perceived by the consumer.

The fourth objective of this study was to attain a first level market segmentation by defining students' clusters based on satisfaction from fruit quality. In this study, three clusters were derived. From these clusters only one seems to satisfy the fruit quality requirement, while the other two clusters are either indifferent or dissatisfied. The lowest FCC refers to the safety attribute factor. If the consumer, while buying and consuming a fruit, has no cues for credence quality attributes (safety attributes), s/he will use word-of-mouth, the media and other sources of information to form expectations.

Dimara and *Skuras* (2003) states that the importance of certification as extrinsic quality cues varies among consumers and thus the use of such quality cues targets specific segments of the market. Certification clearly targets the highly educated, single consumer that does not spend time receiving information from specialist columns in the media but relies on information received from personal contacts and the product's label. The use of such quality cues may be potentially useful in creating niche markets.

5. Conclusions-Limitations

The conceptual framework was to investigate the perceived quality factors influencing food quality and especially fruits. This first objective was achieved both by qualitative and quantitative research, extracting 14 attributes as the ones defining fruit quality. The second objective of the study was to investigate the satisfaction level derived from fruit quality. This was achieved from field research and revealed that satisfaction from fruit quality may be considered low, something that producers, distributors, marketing staff, and quality policy makers must take into account. The third objective of the study was to extract the factors defining satisfaction from fruit quality. This was achieved by factor analysis where three factors derived, explaining 60.9% of total variance. The last objective of the study was to perform a first level market segmentation based on the derived factors of fruit quality satisfaction. This was accomplished by K-Means Cluster analysis, where three clusters were extracted namely "dissatisfied", the "indifferent" and the "satisfied" from fruit quality. Cluster centres clearly show that there is a large range of improvement through quality policy and marketing techniques.

The results of this study should be interpreted with several unavoidable limitations in mind. First, although the sample of respondents used in this study was adequate for the purposes of this study, it cannot be considered representative of the general population. This limits the

generalisability of the results. The analysis of the scale items needs to be examined using a nation based representative sample in terms of geography and demographics. Although the findings of this study may not be generalised without further empirical testing, this study adds to the overall knowledge referring to fruit quality and satisfaction derived from it. Moreover, it provides a foundation for further research on the issue.

Another limitation is that there may be other features influencing fruit quality and the continuous the development of the scale measuring satisfaction from it. This study was limited to the variables, which are mentioned as the most important factors in the focus groups and also consistently and repeatedly mentioned and partially supported by empirical results in the literature. They are also recognised, as key items affecting food quality. Future research should consider other variables, which include the explanatory power of the findings. Finally, this study was exploratory in nature and future research should be carried out to confirm the findings of the current study.

References

[1] Aaker, D.A., Kumar, V. and Day, G. S. (1998). *Marketing Research*. 6th Edition, John Wiley and Sons Inc, New York.

[2] Abbott, J. A. (1998). Quality measurement of fruits and vegetables. Post harvest Biology and Technology 15 (1999), 207-225

[3] Asp E. H. (1999). Factors affecting food decisions made by individual consumers. *Food Policy* Vol. 24 (2), 287-294

[4] Becker, T. (2000). Consumer Perception of Fresh Meat Quality. *British Food Journal*, Vol. 102 (3), 158-176.

[5] Berdie, R. D., Anderson, F. J. and Niebuhr, A. M. (1986). *Questionnaires: Design and Use,* The Scarecrow Press, Metuchen, NJ.

[6] Cardello, A. V. (1995). Food Quality: Relativity, Context and Consumer Expectations. *Food Quality and Preference*, No.6, 163-170

[7] Carmines, E. G. and Zeller, R. A. (1989). *Reliability and Validity Assessment*. Series: Quantitative Applications in the Social Sciences, A Sage University Paper N.17, Twelfth Printing.

[8] Chisnall, P. M. (1997). *Marketing Research.* 5th Edition, McGraw Hill, London.

[9] Coakes, S. and Steed, L. (1999). *SPSS Analysis Without Anguish.* John Wiley and Sons, Singapore.

[10] de Ruyter K. and Scholl N. 1998. Positioning Qualitative Market Research: Reflections From Theory to Practice. *Qualitative Market Research: An International Journal*, 1(1): 7-14.

[11] Dimara, E. and Skuras, D. (2003). Consumer evaluations of product certification, geographic association and traceability in Greece. *European Journal of Marketing*. Vol. 37 (5), 690-705

[12] Everitt, B., (1993): *Cluster Analysis*. 3d Edition, Edward Arnold A division of Hodder & Stoughton, London, UK.

[13] Finney, W. and Moos, R., (1979*):* Treatment and outcome for empirical subtypes of alcoholic patients, *Journal of Consulting and Clinical Psychology* 77: 127-132.

[14] Goldstein, G. and Linden, J., (1969*):* Multivariate classification of alcoholics by means of the MMPI, *Journal of Abnormal Psychology* 74: 661-669.

[15] Goodal, W., (1978): Numerical classification: In: Whittaker, R. H. (ed.) *Classification of Plant Communities*. Junk, The Hague, 247-86.

[16] Goodman, M. R. V. (1999). The pursuit of Value through Qualitative Marketing Research. *Qualitative Marketing Research: An International Journal*, 2 (2): 111-120.

[17] Grunert, K.G. (1997). What's in a steak? A cross –cultural Study on The Quality Perception of Beef. *Food Quality and Preference,* 8(3):157-174

[18] Hair, J. F. jr., Anderson, R. E., Tatham, R. C. and Black, W. C. (1995). *Multivariate Analysis with Readings*.5th Edition, Macmillan, New York.

[19] Johns, N. and Ross-Lee, D. (1998). R*esearch Methods in Service Industry*. Cassell. London.

[20] Jolliffe, I.T., Jones, B. and Morgan, B. J. T. (1982*).* Utilizing clusters: a case study involving the elderly. *Journal of Royal Statistics Society.* A, 145, 224-236.

[21] Kamenidou, I. (1999). *Market Research of Processed Peaches in the Urban Design Unit of Thessaloniki, Greece*. PhD Thesis, Aristotle's University of Thessaloniki, Greece (in Greek).

[22] Kent, M., and Coker, P., (1996): *Vegetation Description and Analysis: A Practical Approach*. John Willey & Sons, Inc.

[23] Kinnear, T. E. and Taylor, T. (1996). *Marketing Research. An Applied Approach*. McGraw Hill, New York.

[24] Kupiec, Beata ; Revell, B. (2001) Measuring consumer quality judgements, *British Food Journal*, Vol. 103 (1), 7-22

[25] Lehmann, D.R., Cupta, S., and Steckel, J.H. (1998). *Marketing Research.* Reading, MA: Addison Wesley –Longman.

[26] Malhorta, N. K. (1996). *Marketing Research. An Applied Orientation*. Prentice Hall, Englewood Cliffs, NJ.

[27] Mannion, M.A., Cowan, C., Gannon, M. (2002). Factors associated with perceived quality influencing beef consumption behavior in Ireland. *British Food Journal*, Vol. 102 (3), 195-210

[28] McIntyre, M. and Blashfield, R., (1980): A Nearest-Centroid Technique for Evaluating the Minimum-Variance Clustering Procedure, *Multivariate Behavioral Research* 15: 225-238.

[29] Mertens, D. M. (1998). *Research Methods in Education and Psychology*. Sage, Thousand Oaks, CA.

[30] Milliken, J. (2001). Qualitative Research and Marketing Management*. Management Decision,* 39 (1): 71-77.

[31] Monroe, K.B., Krishnan, R., (1985). The effects of Price and Subjective Product Evaluations. In : Jacoby, J., Olson., J. Perceived Quality. Lexington, MA, :209-232

[32] Moskowitz, H. R. (1995). Food Quality: Conceptual and Sensory aspects. *Food Quality and Preference*, No. 6: 157- 162

[33] Oliver, R.L. (1997) Satisfaction: A Behavioral Perspective on the Consumer. Mc Graw – Hill New York, N.Y.

[34] 'O Neill, M., Black, M (1996). Current Quality Issues in the Northern Ireland Tourism Sector. The Total Quality Magazine, No.8: 15-19

[35] Ophuis, P.A.M.O; van Trijp H.C.M.(1995) Perceived quality: a market driven and consumer oriented approach. *Food Quality and Preference* Vol. 6 (3), 177-183

[36] Rosen, D. (1984). Consumer Perceptions of Quality for Generic Grocery Products: A Consumption Across Product Categories. *Journal of Retailing* No. 6: 64-80.

[37] Shewfelt, R. L. (1999) 'What is quality?' Postharvest Biological Technology.

[38] Spector, P. E. (1992). *Summated Rating Scale Construction: An Introduction*. Sage University Paper Series. No. 82, On Quantitative Applications in the Social Sciences. Sage, Beverly Hills, CA.