

## STUDY ON FOOD QUALITY

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**Abstract:** *Speciality literature and studies prove that more often than not, consumers do not attach great importance to food quality, therefore many errors occur with rather serious consequences on the consumer. Consumers should be much better educated and informed regarding food quality, both from a theoretical and a practical perspective. As a result, perhaps, if the consumer has information regarding food quality, for example in terms of nutritional, sensorial, hygienic and aesthetic aspects, he will be more demanding as to his choice of products.*

**Key words:** *quality, nutritives, sensorial, hygienic, aesthetic, information and education.*

### INTRODUCTION

Product availability on the market depends on several factors, namely: product price, **product quality**, consumer income, prices and tariffs of other goods and services, packaging and presentation form, quality of the commercial activity and the marketing activities of manufacturers, distributors and retailers. (Chiran A., 2004, page 15). The quality of goods whose properties can be measured is easier to evaluate because the specific quality requirements are clearly defined. Some consumers assess the quality with very expensive goods. They believe that "you get only what you paid for" (Păunescu C., 2004, page180). In agrifood production, quality is a result of the following elements: food composition; psychosocial or subjective quality; usage quality or service; and technological quality (Chiran A., 2004, page117). It is quite often noticed the fact that, when it comes to the meaning of quality concept, there occur many errors with very serious consequences on the consumer. This way, the "quality" is mistaken with the ability of goods of being fashionable, of having a pleasant design and a stylish package. The quality depends on what you need and on how much you are willing to pay (Păunescu C., 2004, page180). It is important for a consumers to bear in mind the significance of the 4S when they purchase a product for the first time: Satisfaction, Service, Sanitary (Health) and Safety. The quality of a product is a combination, a compromise of all the components. The quality of products also represents the ultimate expression of the technological process applied, which inprints products with essential qualities, making them useful for the purpose for which they were designed (Chiran A., 2004, page 117).

### MATERIALS AND METHODS

As regards to consumer information, both theoretical and practical, it is important to focus on certain elements of quality

- Quality under **nutritional** aspect, conditioning the human health, with the following main nutritive factors: protein content, carbohydrates, vitamins, etc; (Chiran A., 2004, pag.118). In Table no.1, there are presented the organic native substances and inorganic native substances in some foods.

Table 1

## Native substances in certain food products

Food product	Water %	Carbohydrates%	Lipids%	Proteins %
pork	65,0	-	16,2	18,0
milk	87,5	4,8	3,5	3,5
eggs	72,5	1,5	11,6	13,3
apples	87,0	12,1	-	0,5
potatoes	76,4	20,6	-	2,0
onion	88,0	9,8	0,3	1,3
wheat	14,0	68,7	1,8	13,8
green beans	90,0	6,0	0,3	3,0

Source: Diaconescu I., 2007, page 16

- **Sensorial** quality is based on sensorial attributes (organoleptic) such as: smell, taste, texture etc. (Chiran A., 2004, pag.118).

Table no. 2. presents a flavor profile for certain food products.

Table 2

## Flavor profile for certain food products

Food product	sweet	bitter	acid	salty
Wine	1,0	7,5	6,7	1,3
Coca-cola	11,2	2,2	5,0	1,3
Grapefruit juice	3,2	2,0	35,5	2,0
Coffee without sugar	1,0	42,3	3,2	1,0
Coffee with sugar	3,2	23,8	3,2	1,3
Honey	56,4	2,4	1,8	1,3

Source: Vizireanu C., Istrati D., 2006. page 53

- **Hygienic** quality determined by the natural toxicity (inprinted by the intoxications caused to plants), chemical and microbiological contamination or other organic contamination (Chiran A., 2004, page 118). For example the main types of contaminants are follows:
  - physical: metal particles, sand, radioactive fallout;
  - chemicals: pesticides, chemicals, heavy metals, mycotoxins;
  - biological: mushrooms etc. (Petrescu V., 2005, page187-189).
- **Aesthetic** quality, namely the method of presenting the products on the market in order to emphasize the qualitative aspects (for example: the packaging) (Chiran A., 2004, page118). The decision of selecting a particular package is an important economic decision; especially given some of the possible damages caused to the packaged products, which are listed in Table no 3.

Table 3

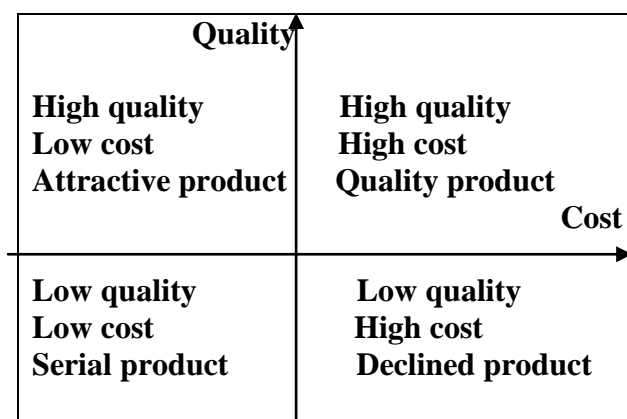
## Examples of damages caused to packaged food products

Mechanical damages	Breaks, shocks, crushing, vibration
Damages caused by environmental factors	High and low temperatures, water, humidity, light
Other damages	Chemical contaminations, damage caused by insects

Source: Manole V., Boboc D., Istudor N., Ion R, A. 2005, page 112.

An example supports the above by stating that, in recent years vacuum packaging has become of particular interest, namely for products deteriorating faster when stored in refrigerated spaces. Method is used for fat fish, shrimp and meat. The method allows increasing the shelf-life of these products compared to that of traditional packaging (Tofan I., 2005, page 231). Resuming the paraphrasing "you get only what you paid for", it can be observed that the literature mentions that there may be serial products, quality products,

attractive products and declined products, as shown in Fig. 1.



**Figure 1 Classification of products according to quality /price perceived by the consumer**

Source: Păunescu C., 2004, page 183

Another possible classification for the quality characteristics of food products can be made by defining only two categories, namely "physical" features and "hidden" features. In the first category we include: color, taste, flavor, texture, viscosity, etc., and in the second category: the nutritional value, the microbiological purity, etc. Unlike physical characteristics of the food, the hidden ones, as shown in the category name can not be seen or felt, they are measurable only through standard chemical and microbiological procedures. Some of these attributes such as the nutrient content, have positive values and must be measured, others register negative values and, if they are present in food composition, can be dangerous to the consumer. The presence of certain prohibited substances (from the category of dyes, additives etc.) render the food insecure and some toxic substances render the food dangerous. (Boboc D., 2006, page109-110). Making the purchase decision is based on the value concept that the consumer quantifies by making an economic assessment of the goods, according to their attributes (quality and price in the first place) (Păunescu C., 2004, page182). A quality food product is generally sold to the purchaser at a higher price because it requires production costs and higher conversion. Quality policy must be linked both to the additional entailed costs, but especially with the (retail) price paid by the consumers. (Constantin M, 2007, page 100). The literature mentions certain factors that had negative effect on purchasing food, but also on the consumer. These are:

- the food quality is not always correlated with the price on the Romanian market;
- promoting a high volume of products with a medium or low level of quality at prices apparently accessible, attractive to low-income consumers;
- insufficient control of food production and trade;
- low expectations from the consumer;
- failure to comply with post-processing conditions (transport, storage, etc.) led to premature degradation of products in shelf (<http://www.agir.ro/buletine/122.pdf>, 13.03.2013, hour 12.53).

To show that a consumer must know what the quality of food really means, in order to be informed and properly educated, we try to show that following the check ups conducted by the National Authority for Consumer Protection, at national level, regarding the legality of trading, labeling, presentation and advertising of pastries, donuts and bagels, during the

period 20-24<sup>th</sup> of August 2012, there were found deviations presented in Table no. 4.

**Table 4**

**Violations found**

1. Product quality	-spots of mold, exceeded minimum durability for products and raw materials
2. Storage and display conditions for sale	- storage directly on the pavement - unclean production-space -marketing in unsealed packaging -lack of refrigeration equipment - storage in broken packaging, on a molden grill
3. Informing consumers through labeling of prepackaged products	-lack/wrong/incomplete identification of identity elements -use of raw materials without identifiers and descriptors
4. Display of prices	-failure to display prices in a visible, legible way for prepackaged products -no display of selling prices

Source:[http://www.anpc.gov.ro/index.php?option=com\\_content&view=article&id=192:control-ansvsa-anpc&catid=23:comunicate-de-presa&Itemid=72](http://www.anpc.gov.ro/index.php?option=com_content&view=article&id=192:control-ansvsa-anpc&catid=23:comunicate-de-presa&Itemid=72), 13.03.2013, ora 14,28.

**RESULTS AND DISCUSSIONS**

In order to inform the consumers certain quality aspects must be insisted upon:

- nutritional aspect by presenting the chemical composition of some of the foods;
- sensorial aspect by presenting a flavor profile for some foods;
- hygienic aspect by showing the main types of contaminants;
- aesthetic aspect, where the package choice is an important economic decision.

To support the above mentioned and emphasize the importance of quality, the assesments performed by the supervisory bodies revealed certain deviations from quality in terms of nutritional, sensorial, hygienic and aesthetical aspects, all presented in table no 4.

**CONCLUSIONS**

For a product to enter the market, it depends on several factors, including the product quality which is very important. Some consumers assess the quality with very expensive goods. They believe that "you get only what you paid for". Quality must be seen by the consumer in terms of nutritional, sensorial, hygienic and aesthetical aspects.

Following check ups carried out by the National Authority for Consumer Protection there were registered violations, such as: food quality, storage and display conditions, consumer information through labeling of prepackaged products and price display. Consumers need to be more demanding regarding his choice of food products and not least be better **informed and educated**.

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