THE ANALYSIS OF COUNTERFEITING FOOD PRODUCTS

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Abstract

The issue addressed in this paper makes a significant contribution to research on the effects that food tampering has at the expense of consumer health. Nowadays quality and food safety that consumers are entitled directly reflects the quality of life. In other words the present subject is of particular importance to the work of the bodies created for the purpose of protecting the health and quality of life of consumers. This study has an important role both in the short and long term through proper understanding of the terms of quality, adulteration and food safety. The essential aim of this article is played understanding and easy identification of counterfeit food. Thus the awareness of counterfeit food products consumers are becoming more aware and responsible on quality of life. Quality will always be one of the most important competitive factors of ensuring health and environmental protection.

Key words: analysis, consumers, counterfeiting, food products, food quality

INTRODUCTION

Currently the entire population has a tendency to move towards a more balanced, healthy and natural diet. Counterfeiting food is not particularly a problem of modernity. In my opinion the food counterfeiting has grown due to increased competitiveness. Addressing this theme comes in support of the idea of consumer recognition of counterfeit food. Intensify the problems of counterfeit food products are increasingly causing more uncertainty. An absolutely necessary tool in the analysis of food counterfeiting is the eco-label that provides information about the environmental impact, promoting low impact products due to the health and quality of life. At present, economic entities granted increasingly more importance upon demonstrating healthy environmental performance by identifying the food to be easily forged. Parallel public opinion became increasingly interested in environmental issues than they frequently reflected in consumer behavior, showing interest in products that are not harmful to the environment.

MATERIALS AND METHODS

In this paper, the study of literature has been used with regard to the evolution of counterfeited food products. In other words, the materials used in this research are making direct reference to the study of literature and related data processing as a result of the research made for the action of counterfeiting food products. The analysis refers to the food products in our country that are daily counterfeited. I also debated the percent of milk safety in India as an example of food products that conform with health and safety standards. [1]

RESULTS AND DISCUSSIONS

This section presents the evolution of counterfeiting food products. According to literature forging operation can be defined as obtaining a product similar to another already on the market, the operation carried out in order to deceive, "to fool the consumer" and obtain illegal income. Due to the amplification of the phenomenon of counterfeiting of food and the danger it presents their counterfeiting in our country and abroad have taken a series of measures for
prevention and sanctioning of any falsifications, especially among food. Actions such as fraud, counterfeiting goods and substitutions are part of the fraudulent goods category, which measure human society development took on a large scale. Among the potential sources of fraudulent goods we can identify: market economy based on free adjustment of supply and demand; broadening and deepening trade and international markets and increasing the number of traders involved in a process chain.

Thus we redefine falsification as a fraudulent transaction that is to change the weight ratio between the components of a product. The infringement is ascertained at the time of the product introduced in trade composition and quality indices change from normal ones or declared. Replacing a product involves modifying its composition by replacing part of one or more substances with others, quality and lower value.

Currently due to the intensification of this phenomenon are promulgated and implemented in more and more laws, rules and regulations that support and protect consumers and ensure quality of life. Such use or substitution of goods or any other products and exposure for sale or selling actual goods of this kind, aware that they are counterfeited or replaced are illegal commercial activities and entail criminal or administrative liability. The falsification or substitution in quality is represented by any deception or attempted deception on the nature, quality characteristics, composition, content of useful substances in the product replacement of other harmful substances, and falsifying name, description, or other misrepresentation as to the origin, quantity and identity of the goods or services that contribute to determining the amount or quality of product or not. Food safety is a key factor in the delimitation of counterfeit products. Signifies the element of food security and human nutrition that refers to features which should satisfy any food component. They refer to the nutritional value of the products and to identify and respect hygienic qualities. In accordance with the hygiene requirements relating to the protection of health related foods presented and implemented by the Ministry of Health, define food falsification as an admixture of any natural or synthetic substance in products in order to hide the defects related to food products, but also with the aim of changing the unjustified property or construction through their natural composition and manufacturing standards that will affect the quality of the value of such products. In other theorists falsification concept is presented as the operation of obtaining and marketing of products that are actually almost accurate copies, lower quality of original products marketed fraudulently operation carried out with the aim of having unlawful income.

**Food security**

Through the intensification of the term emergence of more and more counterfeit and fake products in both food (as well as in other fields), food security has become a crucial factor appeared any time where all people have physical and economic access to food reliable and nutritious food that meets the needs of the human body so that they can lead a healthy life. This is a highly publicized issue both nationally and internationally. It also should be noted that Earth's population nutrition international expansion is a concern to WHO (World Health Organization), FAO (Food and Agriculture Organization), the Codex Alimentarius Commission, etc.. Food safety is an essential element of food security and human nutrition, which must possess the following characteristics: to have intrinsic nutritional value, nutritional value as high bioavailable and always hygienic qualities [3].

In qualitative terms, the concept of food safe, healthy and nutritious includes a variety of items. We discuss the one that contains all the nutrients and biologically active substances that man needs for health maintenance and prevention of chronic diseases, being a food without toxins, pesticides, chemical and physical contaminants and pathogens without the type of bacteria and viruses that can cause various diseases.

**Study on presenting the forged 11 commonly consumed foods existing in**
Romania
Many of the foods consumed on a daily basis are counterfeit; starting from meat and dairy to honey, cereals, breads and drinks. Thus we can draw up a list of the foods consumed counterfeit:

1. Olive oil and olives
Currently virgin olive oil is one of the counterfeit foods. One of the methods commonly found counterfeiting is the replacement of parts extra virgin olive oil is the refined form or with another type of oil, such as the soybean inferior quality. Olives can be falsified by the oxidation of iron glucometer in order to obtain a uniform color and are preserved in salt can cover any change in taste due to alteration.

2. Flour
In this case falsification can be achieved by mixing: other cereal flour or foreign seeds (corn, peas, beans, rice), common wheat flour durum wheat flour, potato starch or corn, improvers, emulsifier and oxidation banned or over dosage allowed substances to increase shelf life and to accelerate maturation or bleaching flour.

3. Wild salmon
The easiest way of falsification of fish is selling cheap fish species such as salmon or other fish. Wild salmon is known by the fact that it has a high level of Omega 3, which protects the heart system. This is not valid in case of salmon or rainbow trout culture, cheaper species with that salmon is often replaced.

4. Meat
The only method of falsification of whole meat is the marketing of less consumed species such as donkey meat; horse etc. as pork or beef. Most often are falsified minced meat and sausages small by replacing valuable ingredients with some to avoid: fat, rind, tendons, ears etc. Can be added for color and flavor additives, soya flour consistency and excess salt or spices to mask spoilage. It can also be counterfeited by subjecting to ionizing radiation used to extend the shelf life of products, and to accelerate maturation and defrost.

5. Sausage
Most contain mechanically deboned meat, leftover meat on the bones remain. Thus has a lower nutritional quality and may contain fragments of bone, cartilage, tendons and skin. Also this mix is added to a variety of E-in order to provide a true meat-like colors and holding a sweet taste.

6. Milk
Frequent spoofing is achieved by adding water by extraction of the fat cow's milk by mixing with the sheep, by preventing the concealment of defects, or alters it by maintaining acidity installation with the addition of neutralizing substances or preservatives.

7. Cheese
Are forged through partial replacement of proteins of milk with egg white powder, blood plasma or vegetable origin proteins derived from peas, grain or soy.

8. Cream by adding flour, gelatin, skim milk, chalk or gypsum.

9. Butter can be counterfeited by replacing milk fat with other fats shoddy animal or vegetable.

10. Honey
For example honey sold as Acacia (made aware as an expensive assortment) can be, in fact, polyclonal honey or rape, with lower benefits. Likewise for multiplication of honey, many manufacturers add corn syrup industries, which diminish the nutritional value. It seems that the safest is honey candied, crystallized.

11. Coffee
The most known and used types of coffee are Arabica, high quality, robust, less flavorful and cheaper. The easiest way of forging a coffee marketed as high quality robusta coffee is the addition of a rate greater than arabica. It is possible that some packs of coffee "quality" to find chicory, malt, chickpeas, corn, starch, caramel, soy beans, peas or beans.

The European system of food safety
The implementation of such a system requires a legislative development of the field, and performing actions in the idea:
- Ensure implementation of management and control systems for efficient and effective regarding food safety and quality, animal health and animal feeding, as well as plant health EU member countries inside and outside the community which exported food in the EU and are evaluated according to European standards relating to the field under study.
- Sound management of foreign relations with countries outside the EU and other international bodies and organizations on food safety, their quality and other associations.
- Management and supervision of relations with the European Food Safety Authority - European Food Safety Authority (EFSA) and ensure the prevention of possible risks.

![Fig. 1. The percent of milk safety in India as an example of food products that conform with health and safety standards](source)

Source: www.fhrai.ro - Food and Safety Standards Authority of India

CONCLUSIONS

In pursuit of profit contemporary society has led some manufacturers to make compromising quality standards and to fool consumers using cheap ingredients, to the detriment of our health.

In terms of food quality found a safe, healthy and nutritious includes a variety of items. That means a food that contains all nutrients and biologically active substances that we need to maintain health and to prevent the occurrence of chronic diseases.

In addition, we are talking about a toxin-free food, pesticide, chemical and physical contaminants and pathogens such as bacteria and viruses that cause diseases. According to the EU and the World Health Organization, food quality and safety should be based on the efforts of all those involved in the complex process that begins with the origin and ends with when they reach the board.

REFERENCES