

## FOOD FRAUD - A PERMANENT CONCERN OF THE AUTHORITIES WITH ATTRIBUTIONS IN CONSUMERS PROTECTION

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**Abstract:** According to Article 8 of Regulation (EC) No. 178/2002, food law aims to prevent fraudulent or deceptive practices and the adulteration of food. Articles 34 to 40 of Regulation (EC) No. 882/2004 provides that EU Member States must cooperate with one another to assure the administrative assistance and strengthening cooperation across borders regarding food fraud. The food fraud network (FFN) is made up of 28 national contact points, which are authorities named by each EU member. European Commission coordinates and supervises the measures taken by Member States. The paper presents essential aspects regarding food fraud by analyzing the activity reports and the results of checks carried out by European Food Safety Authority and FFN.

**Key words:** food fraud, protection of consumers, food safety

### INTRODUCTION

Definition used by the Food Fraud Network for Food Fraud is "Intentional violation of the rules covered by Regulation 882/2004 which are applicable to the production of food and feed, motivated by the prospect of economic or financial gain".

Goods counterfeiting, substitutions, falsification and other similar practices fall into the category of fraudulent activities [3]. In Romania, the Emergency Ordinance No. 97 of 21 June 2001, republished in 2008, defines counterfeit foods as "foods whose quality, as mentioned in the declaration of conformity, standard or technical specification of the product and the label, was changed, intentionally or unintentionally, in a way that could constitute a health risk to consumers, which could or would harm their interests or misinform them"[2].

From meat and dairy to honey, cereals, breads and beverages, many of the foods we consume daily are counterfeit. In pursuit of profits, some manufacturers are sacrificing quality standards and their deceiving customers with inexpensive ingredients.

Extra virgin olive oil is one of the most counterfeit foodstuffs today. A common problem of counterfeiting method is to replace a portion of either extra virgin olive oil, refined form, or another type of oil, such as the soybean inferior. Olives can be forged by the oxidation of iron gluconate, to obtain uniform color. In addition, they are preserved with salt which may mask any taste changes caused by alteration.

Flour composition of bread and pastry can be risky for health if it is not integral flour. Forgery can be achieved by mixing flour with: foreign seed flour or other cereals (corn, peas, beans, rice), wheat flour, durum wheat flour, potato or corn starch, emulsifier and oxidation over dosage prohibited or permitted substances for extending the shelf life and bleach accelerating the ripening of flour.

The easiest way of falsification of fish species is trading cheap as salmon or other fish expensive. It is known that wild salmon have high levels of Omega 3 which protects the cardiovascular system. The same thing is true for farmed salmon which is often replaced with cheaper species of salmon.

The only method of falsification of whole meat is selling some animal species less consumed as meat donkey, horse etc. as pork or vita. Frequently are falsified ground meat

and sausage with some valuable replacement parts to avoid: fat, rind, tendons, ears etc. Also, additives can be added for color and flavor, soy flour consistency and excess salt or spices to mask the alteration. Spoiled meat can be put on sale by masking the defect with the addition of spices, food additives and other ingredients.

Milk can be forged by the addition of water, by extracting the fat, the mixture of cow's milk or sheep to prevent the masking defects or installation or alteration by maintaining the acidity with the addition of neutralizing agents or preservatives.

Cheeses are skewed by partial replacement of the milk protein powder, egg white, blood plasma, or vegetable proteins from peas, cereals or soya.

The easiest way of forging a coffee sold as high quality, is the addition of a rate of robusta coffee higher than arabica. It is also possible that in some coffee packages "quality" to find chicory, malt, chick peas, cereals, starch, caramel, soy beans, peas or beans.

Many kinds of honey on the market are counterfeit. First, sold as acacia honey (high range) can be, in fact, honey; rapeseed oil, with little benefit. In addition, for the multiplication of honey, many manufacturers add glucose syrup industry, which decreases the nutritional value of them. It is safest to buy honey candied, crystallized.

The Regulation 510/2006 govern the denominations of origin and geographical indications of foods. "Designation of origin" means the name of a region, country, and points agricultural product or foodstuff originally found in the area, which quality or characteristics are essentially or exclusively attributable the geographical environment, including natural and human factors. The product is produced, processed and packaged only in that geographical area. "Geographical indication" means the name of a region, or, in rare cases, a country. This indicates that an agricultural product or foodstuff originally came from that region, whose specific quality can be attributed to this region and it is manufactured, processed and/or packaged in it.

Regulation (EU) 1169/2011 on food information for consumers, introduced the obligation to provide essential health and nutrition information, and highlight the presence of allergens. The regulation also prohibits the inclusion of misleading information.

## **MATERIALS AND METHODS**

Documenting the work consisted in using data from the annual reports submitted by the Food Fraud Network in 2014 and 2015, legislation and some authors.

## **RESEARCH RESULTS**

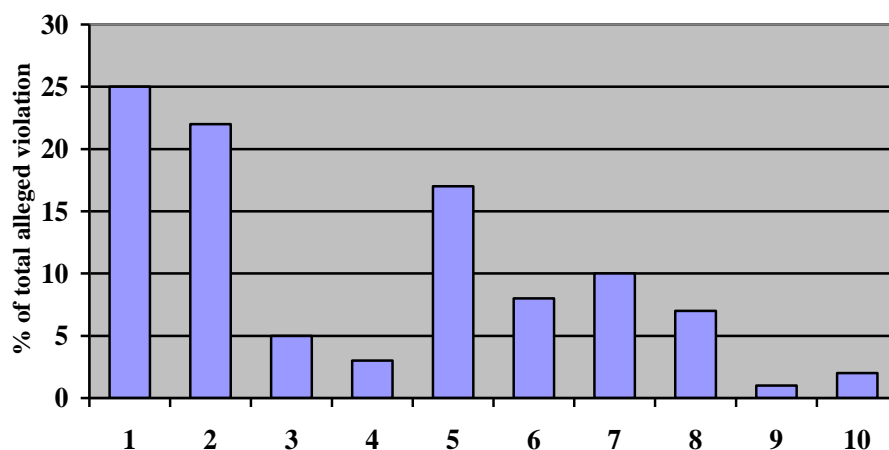
According to the Pilot Project EIR report' Analysis of food integrity in Romania, in 2015 [5], the top 10 of products most at risk of fraud in the romanian food sector is: Olive oil, Fish, Organic food, Milk, cereals, Honey and maple syrup, Tea and coffee, Spices, Wine and Certain fruit juice.

The aim of The Food Fraud Network, is to facilitate administrative assistance and cooperation in the case of suspicion of fraud with a cross-border element and to facilitate cooperation between the European Commission and Member States as well as the tasks of coordination of the EC. The advantage is the rapid exchange of information.

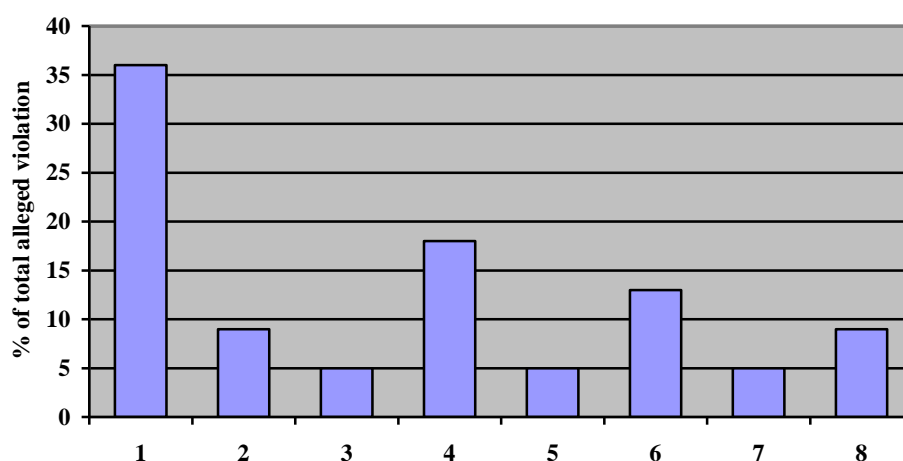
FFN is used in the following cases: cross-border dimension; violation of EU food chain law; deception with "intention"; economic gain for the potential fraudster. If there is a risk to public health, involve the notification of the RASFF (EU Rapid Alert System for Food and Feed).

In figures 1 and 2 are presented the cases exchanged on the FFN by type of alleged violation (dates from the annual reports submitted by Food Fraud Network Activity Report 2014 and 2015). We observe that "labelling non-compliance" which involve (place of origin; addition of water; dates; health claim; nutrition claim; denomination; ingredients;

treatment and/or process; weight and/or volume; others) is the principal cause of the alleged violation in 2014 and 2015, followed by falsified documents, substitution, prohibited substances (additives; growth promoters; pesticides; veterinary medicines; others) and the suspicion of illegal export.



**Figure 1. Cases exchanged on the FFN by type of alleged violation in 2014 [7].**  
*Legend: 1- Labelling non-compliance; 2- Falsified certifications/documents; 3- Counterfeiting; 4- Adulteration; 5- Substitution; 6- Prohibited treatment and/or process; 7- Prohibited substances; 8- Prohibited product/unfit for human consumption; 9- Official registration number(absence of); 10- Other(illegal export).*



**Figure 2. Cases exchanged on the FFN by type of alleged violation in 2015 [8].**  
*Legend: 1- Labelling non-compliance; 2- Falsified certifications/documents; 3- Absence of documentation; 4- Suspicion of illegal export; 5- Species or ingredient substitution; 6- Prohibited treatment and/or process; 7- Prohibited substances; 8- Prohibited product/unfit for human consumption.*

According to the Pilot Project EIR report<sup>2</sup> Analysis of food integrity in Romania (2015), the main causes, predisposing factors that make integrity issue is relevant food products are: regulatory system for food products chain incomplete, limited transparency of the relevant authorities monitoring results and a low consumer reaction - this causes an insufficient consumer information [5].

In such context, the consumer is not informed if deviations are identified and dealt with minor, serious or very serious or which operator identified irregularities and sanctions, having the opportunity to select products and producers.

## CONCLUSIONS

Fraudulent marketing of agricultural products due to the complexity and the effects it produces generates a negative impact in terms of economic and financial, social, health and the environment aspects.

Food fraud is a permanent concern of the authorities with attributions in consumer protection. The food fraud network (FFN) activity is to prevent fraudulent or deceptive practices and the adulteration of food. Labelling non-compliance is the principal cause of the alleged violation in 2014 and 2015, followed by falsified documents, substitution, prohibited substances and the suspicion of illegal export.

Statistical conclusions regarding potential cases of "food fraud" in Europe can not be drawn from these data given, that Member States can exchange information outside FFN and cases that have no cross-border dimension, and namely that occur purely national, not exchanged through the network.

Factors that can contribute to the prevention of fraud food, are: better traceability of ingredients and products in the food chain; increased attention to checking of goods and products imported from third countries and improved communication and inter-institutional collaboration on the integrity of food products.

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