## ETHICS AND TRUST IN QUALITY ASSURANCE

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**Abstract:** *Ethics is the recognition of good* and evil. Ethics refers to the values, principles and codes by which people live Food and ethics are closely connected. Ethics and trust in food safety are of crucial meaning because we cannot be self sufficeint in the production of food and we have to trust the food producers and the authority. In this article food quality and assurance safety are characterized. In the following parts ethics in food, codes of ethics, the rules of internal auditor, and the Ethical Matrix are described. The main aim of this paper is to focus on the meaning of ethics and trust in food production and food quality assurance

Key words: ethics in food, food safety, food quality, food quality assurance, ethical matrix

#### 1. INTRODUCTION

Food safety and quality are very important for every consumer because everyone of us is a food consumer. Food influences our health. Food that is available to consumer should be safe, although every once in a while hazard in food appears. Producers are the most responsible for food safety. They are obliged to implement food quality assurance systems such as: GHP, GMP, and HACCP. The can also implement ISO 22000 standard. Thanks implementation and maintenance of these systems, manufacturers shall ensure the quality and safety of food. If all producers obey the law and standards requirements, hazard in food wouldn't appear. In the last few years there were many food threats, i.e. melamine in milk, dioxin in meat.

Moreover, many food products are adulterated. Food is mainly adulterated because of higher income. Food adulteration is an unethical behaviour.

Result – consumer buy a food product of a lower value and different ingredients than it is presented on a food label, or (what is worse) the added ingredient is a hazard. The problem of lack of ethics in food chain cannot be solved only by food law and standards because people influences food safety by their behaviour, decisions, work attitude, i.e. while buying ingredients, taking measurements, ensuring traceability, food labeling, internal audits. Unfortunately, even the best food safety and quality standards cannot guarantee food safety, if they are implemented and improved with lack of ethics. Ethics should be the primary rule of all activities within food sector. The relation between ethics, food safety and food law is presented in Fig. 1.

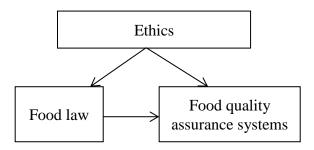


Fig. 1. The relation between ethics, food law, and food quality assurance systems. Source: T. Sikora, in: [11].

In this articles food quality and food safety is being shortly characterized. In the next chapter connection between ethics and quality is described (falsification of HACCP records, food crimes, food

frauds). In the following parts - the code of ethics, ethics while audits, ethics and food labels, ethics of food authorities, The Ethical Matrix, trust.

## 2. FOOD QUALITY AND SAFETY

Food safety is an important characteristic both for consumers and food producers. Food products that are available to consumer have to be safe. Producers are obliged to implement Good Manufacturing Practice (GMP), Good Hygienic Practice (GHP) and Hazard Analysis and Critical Control Point (HACCP) [11].

Food (or 'foodstuff') means "any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans. Food includes drink, chewing gum and any substance, including water, intentionally incorporated into the food during its manufacture, preparation or treatment" [19].

Food law shall aim at the protection of the interests of consumers and shall provide a basis for consumers to make informed choices in relation to the foods they consume. It shall aim at the prevention of:

- (a) fraudulent or deceptive practices;
- (b) the adulteration of food; and
- (c) any other practices which may mislead the consumer [19].

Food shall not be placed on the market if it is unsafe. Food shall be deemed to be unsafe if it is considered to be:

- (a) injurious to health;
- (b) unfit for human consumption.

In determining whether any food is unsafe, regard shall be had:

- (a) to the normal conditions of use of the food by the consumer and at each stage of production, processing and distribution,
- (b) to the information provided to the consumer, including information on the label, or other information generally available to the consumer concerning the avoidance of specific adverse health effects from a particular food or category of foods [19].

Food business operators shall ensure that all stages of production, processing and distribution of food under their control satisfy the relevant hygiene requirements laid down in this Regulation [20].

According to Henson and Traill [8] food safety can be defined as the inverse of food risk.

Food safety is a concept that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use (ISO 22000:2005. Food safety management systems-Requirements for any organization in the food chain).

Food safety means the lack of food hazards. There are three main types of food hazrads: microbilogical, chemical and physicial.

There are many food quality definitions [15, 17, 26]. According to Peri [17] food quality can be defined as the set of consumer requirements such as: food safety (lack of food hazards), food product (the characteristics of food product that are required by law and consumer preferences), nutritional value, sensory characteristics, orgin of food and type of ptoduction, ethical aspects, quality assurance (Good Manufacturing Practice, Good Hygienic Practice, Hazard Analysis and Critical Control Point, ISO 22000), traceability, packaging, product on the market (availability, righ place, righ price). The above characteristics can be divided into two groups: requirements for food products that set the consumers as homo edens, and requirements for product on the market that set the consumers as client. According to Verdu Jover [26] food quality can be defined from the point of view of the customer as: excellence. compliance with the specifications, meet or exceed customer expectations. Moreover, food quality perception by consumers is very subjective [16]. Food quality can be defined as the confirmation to requirements and specifications. Food safety and food quality cannot be considered separatelly because if a product is of high quality it has to be safe, and if a product is of low quality it has to safe, too. Quality of food products is a very important characteristics for consumers while choosing food. Consumers may think that a food product is not tasty but anyway this product has to be safe. The relation between food safety, food health safety and food quality is presented in Fig. 2.

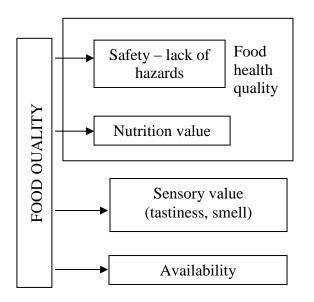


Fig. 2. Diagram of relations between food quality, food health quality and food safety [21, 22].

## 3. ETHICS AND QUALITY

What is ethics? Ethics is the recognition of good and evil. Ethics refers to the values, principles and codes by which people live. Acting ethically means taking values seriously and asking 'what should I do, all things considered? Ethics is not just a part of philosophy, it is also a regulator in our society which defines the limits of acceptance in various issues. It is often needed to take ethical decisions with relevance to food. and especially concerning safety [18]. Food and ethics are intimately connected [7]. Ethics of food is very important because we must consume food to live, and that's why we cannot prevent the risk connected with food [12, 13]. Food is essential for the survival of human beings [6]. What is also important, we cannot be self sufficeint in the

production of food, and we have to trust the food producers and the authority. According to R. Early [5] food ethics should be a tool for decision making within the food industry, for the benefit of people and society, and the food industry itselfs.

The relation between quality and ethics is very interesting. It is commonly believed that high quality cannot be achieved without ethics. Low quality is both the cause and the result of unethical activities. Low quality encourages unethical behavior, i.e. paying for quality being hidden from consumers, food of low quality being accepted by the supply specialist [1]. According to Peter Drucker [4] without ethic and ethical bahaviour nothing can work. According to Skrzypek [23] ethics in business something between conscience and understanding.

## 3.1. Falsification of HACCP records

The main aim of HACCP system is to ensure food safety but if it is not maintained according to rules it may be the source of problems. Employees responsible for food safety assurance should be aware that all measurements they take should provide real information. Ethics should be very important while taking measurements because it is the proof that system works well. The main types of data falsification are:

- signature of the same person the record is completed by the same person 24/7 every day of the year. It means that this person never go home and never have holidays, what seems not to be possible,
- records are completed ahead of time – i.e. the person was going on holidays for 2 weeks and knew that nobody would complete the forms while they were away, records play a very important role because they are the proof of the food safety system results,
- mismatched record entries documented records do not match the indications on the equipment.

For example, a thermometer reads to the 0.1 °C but all records indicate a rounding to the nearest whole number, all measurements should be taken accurately.

## 3.2. Food crimes

The main seven food crimes are the following [27]:

- 1. Blackmail "The insidious targeting of the public by global big business putting huge marketing muscle behind products that fail to fit in with healthy eating advice".
- 2. Contamination "The unnecessary use of chemicals on land and in livestock interference with nature's way".
- **3.** Grievous bodily harm "The disregard of animal rights to keep costs down or, even worse, to pamper our taste buds with so called 'luxuries'".
- **4.** Vandalism "The destruction of the planet by the intensification of food production systems".
- 5. Cannibalism "The practice of permitting animals to be fed with the remains of their own species, or herbivores with animal byproducts, or giving animals feed made from the blood of other animals".
- **6.** Pillage "The careless exploitation of countries, cultures and creeds by multinational concerns milking the so-called global economy".
- **7.** Fraud "The deliberate assault on the taste and appearance of our food".

## 3.3. Food frauds

Food Standard Agency defines food fraud as [28]: "Food fraud is committed when food is deliberately placed on the market, for financial gain, with the intention of deceiving the consumer". Types of food frauds are: selling food which is unfit and potentially harmful, i.e. selling goods that are past their 'use by' date, selling meat (beef and poultry) without the information about country of orgin, using products

substitutes instead of the real ones, making false statements (ingredients, country of orgin, preservatives etc.)

## 4. CODE OF ETHICS

The main purpose of codes is to show the correct behaviour. In the area of food there are many codes of ethics. Very often food producers publish their own codes of ethics in food. According to A.C.Cleland [2] the code of ethics in food should include:

- production of safe food,
- production the high value food,
- honest information to consumers,
- perform under the professional standards in business,
- continuous development,
- sustainability.

(Institute of Food Science and **IFST** Technology) Professional Conduct & Professional Conduct Guidelines (guideline No. 1. Wholesomeness of food) - the aspects involved in wholesomeness are: satisfaction, consumer compositional hygienic condition standards, manufacture, storage, and handling, absence of injury to health, nutrition value, nutrition comparison.

The rules of ethical behaviour of food producers are inter alia [3]:

- 1. Obey the requirements of the law.
- 2. Respect the needs and expectations of consumers.
- 3. Use the methods and production systems that are environmentally friendly.
- 4. Improve their knowledge.
- 5. Provide their workers with the proper working conditions.
- 6. Be honest.
- 7. Remember that the source of the added value and the most important resource are the employees.

## 5. ETHICS WHILE AUDITS

In the standard ISO 19011:2011. Guidelines for auditing management

systems – the guideliness of auditor's behaviour is elaborated. The six principles are:

- 1. Integrity the foundation of professionalism: perform their work with honesty, diligence, and responsibility; observe and comply with applicable any legal requirements; demonstrate their competence while performing their work; perform their work in an impartial manner, i.e. remain fair and unbiased in all their dealings; be sensitive to any influences that may be exerted on their judgement while carrying out an audit.
- 2. Fair presentation: the obligation to report truthfully and accuratelly.
- 3. Due professional care: the application of diligence and judgement in auditing.
- 4. Confidentiality: security of information.
- 5. Independence: the basis for the impartiality of the audit and objectivity of the audit conclusions.
- 6. Evidence-based approach the rational method for reaching reliable and reproducible audit conclusions in a systematic audit process.

These rules apply to ethical behaviour during carrying audits. If auditor follows these rules, the audit is a reliable tool supporting quality politics [14].

The American Society for Quality (ASQ) has elaborated the code of ethics of Certified Quality Auditor and Certified HACCP Auditor. This code of ethics takes into consideration: confilet of interest, confidentialy, proprietary information, and the handling of unacceptable situations [24].

Ethics concerns the activities of free and wise people [25].

## 5.1. Ethics and food safety authorities

Food authorities supervise and control the quality and safety of foodstuffs on the market.

When a hazard appears, they should immediately take actions to prevent the spread of food hazard, but sometimes they react too late. What is also imortant they should treat all food producers equally irrelevat whether they are big companies or small size producers. They should be aware that they are also responsible for food safety.

## 1. ETHICS AND FOOD LABELS

Food labels are the source of information about food for consumers. Based on food labels consumers decide if a particuar product meet their needs. There is always information asymmetries between buyer and seller/producers. However, food labels should present real characteristic of food to consumers. Producers very often do not provide consumers with correct information about i.e. ingredients, the country of orgin or lack of additives. Producer know that consumers i.e. do not buy products containing preservatives that is why they do not inform consumers about the preservatives in food or that consumers are afraid of GMO. Sometimes the font on the package is so small that it is hardly to read.

## 2. A TOOL FOR ANALYSING ETHICAL ISSUES

The Ethical Matrix is a versatile tool for analysing ethical issues. The Ethical Matrix is intended to help people make ethical decisions. It was devised by Professor Ben Mepham, Director of the Centre for Applied Bioethics at the University of Nottingham and a member of the Food Ethics Council. The columns of the matrix are the tree principles of respect for: wellbeing, autonomy and justice. The rows consist of the 'interest groups', i.e.: food producers, consumers, and also non-humans (farm animals, the environment) [7]. The example of The Ethical Matrix is shown in Tab. 1.

Respect for	Wellbeing (healtyh& welfare)	Autonomy (freedom & choice)	Justice (fairness)
People in	Income&	Freedom	Fair trade
the food	working	of action	laws&
industry	conditions		practices
Citizens	Food	Democra-	Availabi-
	safety&	tic,	lity of
	quality of	informed	afford-
	life	choice	able food
Farm	Animal	Behaviour	Intrini-
animals	welfare	al freedom	stic value
The living	Conseva-	Mainten-	Sustain-
environ-	tion	ance of	ability
ment		biodiver-	
		sity	

Tab. 1. The example of The Ethical Matrix.

It is especially useful while considering new technologies in food production.

The Ethical Matrix can be used by number groups or individuals, for example: the government, ethics committees, commercial companies. The results of the use of the Ethical Matrix may be the following: encourage ethical reflection, decide if something is ethical, as a basis for ethical decision making process.

#### 3. TRUST

Consumers trust the authorities responsible for food quality and safety, they also trust food producers and food distributors and food sellers. Consumers while buying food do not have full information about products, they trust in the information on food labels, and they trust that food is safe. That is why when food hazard appears consumer feel unsafe, especially when it is hard to identify a particular producers. According to many research, when hazard consumers stop buying appears product, what is a big loss for the producer. Of course, not all food hazard are revealed because producers are afraid of big losses. Consumers mainly trust the brand, country of origin, or they buy product the usually buy. Usually consumers do not pay a special attention to food safety until hazard appears. Then, they become panic. Very often food safety hazards are revealed by the media what also makes consumers feel more unsafe.

## 4. CONCLUSION

Although systems of food quality assurance are obliged many food scares appears. Food safety is very important for mankind. Consumers while buying food products trust in their quality and safety. They trust in the information on food labels, and that all operators of food chain act in the ethical way. Ethics is the key issue in quality assurance. Ethics should be the first and main rule in food production process. People working in the food industry and other sectors of the food chain should be aware that their decisions and behaviour have an impact on food safety. It is recommended to put more emphasis on the importance of ethics in food quality assurance during training employees and preparing best practices.

Ethics of food is a very complex issue because food sector is developing very fast, new technologies are being invented, new products are being launched onto the market. Food authorities face many ethical problems in food chain. It is also very complex because the chain of food is long. It is built of many parts and has many food chain actors (farmers, food producers, food distributors, food sellers). Each of these groups may act in unethical way. If some problems appears in initial stage it lasts through the rest of stages, i.e. if a farmers do not act in ethical way and do not inform about the producer method production, producer cannot inform the consumers or distributors correctly. All food actors should behave in the ethical way – obey law requirements, provide their clients with full information, pay attention to the safety and quality of food. That is why number of ethical problems may appear. Many companies elaborate their own codes of ethics because they pay attention to the importance of ethics of food. One of the reasons for unethical behaviour may be high competition on the

food market. Producers to be more competitive try to lower the price that may create the possibility of unethical practices, i.e. food frauds. To summarize ethics should be the first and main rule of all food actors as well as employees of food sector, and the food authorities because people make up decisions and in this way they influence the safety of food. No codes of ethics and law requirement works if person is not aware of ethics. The unethical decision of the actor of food chain influences other people life as well as their own because we are all the consumers of food. We all should keep in mind that nothing without ethics and ethical behaviour can work.

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