

Food safety in Tunisia, towards the activation of awareness-rationing and tracking

GHIATOU Lakhdar

Institute of Journalism and News Sciences-Manouba, Tunisia

Email: lakhdar.ghiatou2017@gmail.com

Received: 12/07/2024

Accepted: 17/09/2024

[illegible]

Abstract:

This study aims to build an analytical and theoretical basis for the mechanisms and means of activating food safety in Tunisia, based on the presentation of the theory of persuasive influence known as the theory of the three consequences of Michel LE NID, where we emphasize the issue of the following method of awareness through the use of all communication and media means to spread the reaching and the stage of consumption, finally strengthening the mechanism of Tracking and monitoring using all the necessary means to achieve it, including individuals, media and communication means, in order to avoid falling into health disasters that may threaten the security and food health of citizens, as a result of wrong consumption habits, especially in exceptional circumstances such as the summer season where food poisoning abounds, in addition to the orientation of the general public towards ready-made food and canned food. finally, we present in this work a set of recommendations to be followed to develop food safety protection mechanisms in Tunisia and to be a model for the rest countries.

Keywords: *Food safety-food security-persuasive influence-communication-awareness.*

I. INTRODUCTION

The expansion of civilization and the growing world population led to the intensification of agricultural and livestock production and industrialization in order to meet the growing demand for food, which imposed multiple stages of different and complex food supply which increased the likelihood of food corruption from production to processing, Canning, storage, transportation and ending with distribution. All this is in addition to the emergence of what has been termed the globalization of food production, where a group of food companies and institutions dominate the global food market and impose certain brands on consumers, using methods of advertising and promotional pressure and marketing for a single food style based on Canning, speed and ease of preparation. Therefore, in light of this complex situation, it has become difficult for various regulatory agencies of countries to verify food safety, and to link disease outbreaks with food marketed at a global level due to the increasing export and the diversity and multiplicity of products. In this regard, Tunisia, like the rest of the world, has strived hard to achieve food security and food safety for citizens, despite the availability of natural and human resources, the state often resorts to imports to meet the growing demand for food and to ensure food safety through the development of regulatory and legal mechanisms to ensure the achievement of this task. In addition to the establishment of the National Commission for the health safety of food products and the participation of the consumer defense organization.

Based on the above, we will present in our intervention a presentation on ways to achieve food safety and food security in Tunisia from the perspective of the three-T theory put forward by Michel Lund Michel LE NID on how to achieve persuasive influence in the behavior of individuals according to three basic stages, namely awareness, legislation, and tracking (control or surveillance).

Elements of the intervention:

- I. What is food safety and food security?
- II. Communication and sensitization as one of the ways to achieve food safety in Tunisia.
- III. Adjusting the legal frameworks related to food safety in Tunisia.
- IV. The importance of unifying food safety control structures in Tunisia.

Presenting the problem of the topic and its theoretical framework:

What are the steps and ways needed to achieve food safety in Tunisia?

In the construction of our topic, we begin from the ideas of Michel Lund, who puts it in the theory of the three T, considering that persuasive communication and influence in the behavior of the individual is carried out through three stages:

The first stage (awareness rising):

The mechanisms of linguistic persuasion, clarification and reinforcement of all this with convincing proofs and evidence that flow into the minds of the recipient, and all the sender's information must be simple to understand and perceive, as well as non-contradiction is required to gain credibility, and the wording of the message must be obtained and clearly identify its interlocutor so that it is more convincing, as it must be understood without the need for excessive effort from the recipient, and awareness is required in order to be more effective objectivity, impartiality, or starting from preconceived subjective ideas in dealing with the public, which can stand in the way of awareness-raising, and prevent the sender from reaching his goals.

The second stage (legislation):

They appear especially in public information and advertising campaigns, but they are ineffective in advertising communication, they provide for the realization that awareness does not meet the purpose alone, it shows the risks and benefits of the subject, but legislation plays a positive role in exerting some kind of pressure on the recipient in order to keep up with the

sender in what he calls for.

The third stage (tracking):

According to Michel Looney, "The success of the persuasion and influence process is related to the follow-up and observation of the process as a whole, because a person needs to be constantly reminded and confirmed even in his simple daily matters. The follow-up process, unlike the previous stage, we find its place in advertising communication, it enables the sender to continue broadcasting his messages or cancel them and replace them with others (المشاقبة، 2015، ص200/201)

The above shows us that this trend corresponds to what needs to be done in the field of food safety follow-up, especially at the communicative and persuasive level for the general public.

The above shows us that this trend corresponds to what needs to be done in the field of food safety follow-up, especially at the communicative and persuasive level for the general public.

I. What is food safety and food security:

Food security is defined as the ability of a society to provide adequate food to citizens in the long and short term, in quantity, quality and at prices commensurate with their incomes (حمدان، 1999، ص16)

It was also defined as the production of the state the largest amount of its food needs in an economic way that takes into account the comparative advantage of that country in producing the goods it needs and the limits of its resources and ingredients, and that its products should be competitive with foreign products, as well as agricultural and other exports that return income from hard currency that can be used to import other foodstuffs that do not have a comparative advantage in their production, and all this aims to provide food for citizens in the quantity and quality necessary for activity and health and taking into account the fair distribution of all citizens, especially those with limited income, while maintaining a stock of at least filling the need for three months at least To cope with abnormal conditions (الرحمن، 2011، ص41).

It is recorded here that all definitions focused on the dimensions of food security in their explanations in terms of: food sources, sources of income, basic sources of expenditure such as food and health, energy sources, economic resources and the real level of countries ' self-capacity to cope with crises.

In this direction, various activities of governmental and non-governmental organizations have become focused on the right to food and linking it with the right to health, life, dignity and stability that ensure food in their environment within the framework of expanding the security approach to the food issue of the major transformations of the international community in all directions, the most important (سلماني، 2020-2019، ص138) :

Fear of the deterioration of the general nutritional situation due to the monopoly in commercial transactions in the field of food.

- Increased costs of food production, storage and distribution (grain and feed...).
- The widening of the food gap between developing and developed countries.
- The steady recurrence of food-related crises:
- Exaggeration of the prices of basic foodstuffs, especially cereals.
- The spread of crops of bioenergy production at the expense of human food agriculture.
- Climatic changes and their impact on agricultural production.
- The rise of fuel prices and their impact on the production, storage and distribution of food.
- Countries have withdrawn from subsidizing agricultural products, especially the countries that depend on them.

In addition to the above, the world has known since the mid-eighties relatively food security as a result of the increasing use of chemicals in modern agriculture, but the increase in agricultural productivity in this way brought many concerns to consumers, and began to talk about a new way to increase production is safer for human health, such as alternative farming or organic farming, to show the concept of food safety to the world.

Who defined it: "it is all the necessary conditions and standards necessary during the processes of production, processing, storage, marketing, and preparation of food to ensure that food is safe, reliable, healthy, and suitable for human consumption.

Therefore, the process of food safety begins from the stage of agricultural production to the later stages until consumption, and the incidence of animal diseases such as mad cow disease, which may affect humans in the case of consumption, was defined and the focus was initially on the provision of food commodities in terms of quantity, and then the transition to the stage of quality and quality, and the balance between quantity and quality in food commodities. To begin the stage of focusing on the health dimensions of food commodities, which has become known as food safety, and increased interest in it after the emergence of mad cow disease and foot-and-mouth fever and the terrible fear they caused to the world in addition to avian and swine flu, and three common manifestations emerge in which food loses safety (مریم، 2012-2011: ص66)

Contamination of foodstuffs: caused by the intensive use of toxic pesticides in pest control, poor packaging of goods or the expiration of their shelf life, and the conformity of stored goods to health standards.

- Malnutrition: which is caused by a lack of food supplies, or eating disorder problems and chronic diseases that result from it, since three quarters of the world's poor live in rural areas and earn their living from agriculture, and it appears especially in children and women more than men, and its symptoms include (asthenia of the body, rickets, anemia and mental retardation).

In this context, the United Nations stressed during the World Food Safety Day that "there is no food security without food safety," "if food is not healthy, it is not food "and also stressed the need for food to meet nutritional needs, it helps to ensure that everyone lives an active and healthy life only when it is safe. This is also referred to as after-use in food security (Resources for the United Nations).

The word safety means no harm caused, and with regard to food, it is the absence of harm and health harm caused by the individual's consumption of a certain food, either as a result of an error in preservation or storage, or as a result of the presence of harmful substances in it that may not appear their impact on human health until several years.

The World Health Organization defines food safety as: "all the necessary conditions and standards during the processes of production, manufacture, distribution, preparation, preparation and intake of food, necessary to ensure that food is safe, of known origin, healthy and suitable for human consumption, as stated in the 1996 who report on the role of food safety in health and development: "it is no longer sufficient that food is available in sufficient quantity, or that it contains nutritional content adequate to the needs of the body, but it must also be safe for consumption and not endanger the health of the consumer through infection, pollution or poisoning") General Foundation for Food and Medicine.

On the other hand, according to the World Food Security Index ranking, Tunisia ranks 51st out of 113 countries in the food security ladder in 2018, and ranked 40th according to the food abundance classification due to the direct impact of this element on weather factors, and depending on "access to food" Tunisia is in 62nd place affected by rising prices, and depending on the quality of available food, its safety and how it is used, Tunisia ranks 49th, while ranked 83rd according to the axis of stability and sustainability due to climate change, the state of

agricultural land and irrigation water stocks (المرصد الوطني للفلاحة، 2019، ص23).

As for the abundance of food products, the situation is relatively stable and comfortable at the national level, considering the possibilities available through local production and supply, where there is an important development to cover food needs through local production for many basic resources such as milk, meat, vegetables and cereals, while the situation remains relatively critical for cereals, with a dependency ratio of about 61% in total.

In general, based on the indicators recorded at the national level, the issue of food security in Tunisia can be assessed and summarized in the following points:

- The contribution of local production to cover grain needs by 39%.
- The coverage rate of the trade balance is 71%.
- Cases of malnutrition are 5% of the total population.

On this basis, the committee tasked with developing a plan on the food security system in Tunisia called for the adoption of a food strategy consisting of relative support for food security and partial development of the food system (المرصد الوطني للفلاحة، 2019، ص45).

II. Communication and sensitization as one of the ways to achieve food safety in Tunisia:

The importance of information and continuous monitoring on the issue of food safety in Tunisia is shown by Section 8 of the Law No. 25 issued in 2019 on the health safety of food and animal feed, where it states: "Risk Information focuses on the interactive exchange of information and opinions about the risk and risks throughout the process of risk analysis and risk-related factors and their potential occurrence between the commission and the authority in charge of risk assessment, consumers, consumer representative associations, institutions active in the food sector or in the animal food sector and other interested parties (Official Ride of the Republic of Tunisia No. 2019-024, 2019).

In this context, Lutfi Riahi, president of the Tunisian Organization for Consumer Guidance, stressed that "the organization's concern today is the appropriateness of Tunisian legislation in the field of consumer protection with European and other legislation, and to inform the Tunisian consumer of all developments in the field of food safety," calling for "immediate information to the public opinion and the Tunisian consumer about every product withdrawn from the market in the world so as not to leak into the Tunisian market and protect the consumer.

While acknowledging the "limited awareness of the Tunisian community about the ingredients of food products," Riahi called on the state to intensify awareness campaigns through civil society and in the media in order to find out the extent of their conformity with international standards, in addition to the efforts of the organization to work on the completion of electronic applications to identify some food ingredients that can be dispensed with or replaced with other ingredients less dangerous to health.

In the same context, we can mention one of the most important awareness campaigns, the initiative of the regional authority for the safety of food products in the school environment as part of a sensitization framework for Primary School students under the slogan "safe food for better health" on 17 April 2024, which included 26 members of health advocates from various primary schools in the region.

The presented awareness contents focused on the proper health rules and the risks surrounding food products in this environment, with the inclusion of lectures organized by doctors and specialists in the health safety of food products, with the distribution of a set of allergic props, whether paper or audio-visual and these allergic campaigns in the school environment are included in the program dedicated to the Prevention of food-related risks in the

school environment, and as a reminder, it is a national program that has been in operation since 2023 and aims to raise awareness and better deal with food products and know the conditions of their consumption, and the program is part of the international cooperation project to support communication on health safety for food, the purpose To raise consumer awareness of the risks associated with food, especially the age groups between 5 and 15 years, which are considered more vulnerable to food poisoning (Tunisian Television).

It is also worth mentioning the technical cooperation project that brought together Tunisia and Germany in the field of health safety of food products, held in 2023, in the presence of the president of the German Federal Institute for risk assessment and the president of the German Federal Institute for consumer protection and food safety, with an accompanying delegation, along with representatives of Tunisian ministries and national bodies and structures in charge of implementing this project, including the assessment of the stages completed by the intervening structures and relevant ministries and future programs to achieve the goals of strengthening the system of food safety and consumer protection in Tunisia (2023, *يومية المغرب*).

Here, we emphasize the importance of using European experiences in the field of food safety, to exchange experiences and learn about new technologies to identify and identify risks to safety and food security, especially with Tunisia's constant quest to enter the European market, which is known for tightening export conditions and changing food-related regulations permanently.

III. Adjusting the legal frameworks related to food safety in Tunisia:

The law, which was approved by the House of Representatives in February 2019, is a special and unified legal framework to ensure human and animal health and prevent health risks associated with food consumption, according to the relevant parliamentary committee in its report. It aims to bring the Tunisian legislation into line with what is in force at the international level, especially the European one, given the volume of trade exchanges in this area with the European partner. However, in this context, it raises concerns about its impact on the agricultural sector in Tunisia by imposing European standards.

The provisions of the law on sanitary safety of foodstuffs and animal food apply to all stages of primary production, production, transformation, transportation, storage and distribution of foodstuffs and animal food, including supply, export and related advertising operations. The provisions of this law also apply to foodstuffs in restaurants and bars of all public and private institutions and structures, including public and private hospital and health institutions.

According to Government Order No. 74 of 2021 dated January 21, 2021 concerning the control of the administrative and financial organization of the National Authority for the health safety of food products, its management methods and the management methods of the advisory committee and its composition, the authority is managed by a director general and assisted by the board of the institution, which is a structure with an advisory character, and according to what is specified in Chapter 5, the board consists of representatives of several government bodies, namely: The presidency of the government, the Ministry of national defense, the Ministry of interior, the Ministry of finance, the Ministry of industry and trade, the Ministry of Health, the Ministry of Higher Education, the Ministry of Tourism and the Ministry of local affairs, all of these are appointed by a decision of the minister of Health on a proposal from the relevant ministries for a period of 3 years, renewable once, and the chairman of the council can also invite any person with competence in the field of food safety to attend board meetings in an advisory framework (The official Leader of the Republic of Tunisia, 2021).

The above confirms the importance of the tasks assigned to this body, which necessitated the need to link it with all sectors of the state, either at the level of decision-making or consultation, which are the endeavors exerted by successive governments on Tunisia, especially since the events of Tunisia in 2011(Jasmine Revolution), and the constant emphasis on the permanent involvement of all and the importance of the circulation of power.

It also includes an advisory body with a chairman elected from the members of the committee, and according to that Chapter 12 that: Its members consist of the Director General of the authority, a representative of the National Agency for Risk Assessment, a representative of the National Bureau of mineral water and water healing, a representative of technical centers related to the health safety of food products due to the ministry in charge of industry, a representative of the agricultural research and higher education institution, a representative of professional structures due to the ministry in charge of Agriculture a representative of the International Center for environmental technology in Tunisia, a representative of the National Institute for specifications and industrial property, a representative of the National Accreditation Council, a representative of the Tunisian Federation of industry, trade and traditional industries, representative of the Tunisian Union of agriculture and Fisheries. The commission meets once every three months and whenever necessary to consider the issues on its agenda (The official Leader of the Republic of Tunisia, 2021).

This law defines three basic principles on which it is based, namely, the principle of risk analysis, the Precautionary Principle and the principle of transparency.

The authority is also responsible for diagnosing and following up the health status of plants and animals, as well as identifying, visualizing and adjusting strategies, directions and programs related to pest control and monitoring animal and plant diseases.

The National Authority for the health safety of food products was also entrusted with the task of monitoring the quality of seeds, seedlings, fertilizers and pesticides used in agricultural activity. It also ensures the integrity of economic transactions and the protection of consumer interests in its area of competence.

One of the tasks of this body is the official monitoring of the food chain on a regular basis and according to the risks, and this monitoring is carried out without prior notification. The authority can take special measures, including subjecting a facility to intensive monitoring at the owner's expense when repeated violations or fraud, and can take a temporary decision to close for a period not exceeding 6 months.

The authority also operates a National Early Warning Network for direct or indirect risks to human, animal or plant health, which collects and communicates data and warnings announced both at the national level and in other countries.

It is also noted that this law obliges the National Authority for the health safety of food products to develop plans for intervention that can be updated in the event of a crisis, and also entitles the assistants in charge of inspecting violations in the framework of carrying out their duties several powers, including access during the normal opening or working hours to professional shops, warehouses and stores, they can also carry out their tasks during the transportation of food and animal feed or, in urgent cases, they can intervene outside the normal opening or working hours.

The law on the health safety of foodstuffs and animal feed has established a number of penalties ranging from imprisonment to sin to deter violators .Anyone who deceives or tries to deceive by any means or method in the nature, type, origin, essential elements or quantity of useful elements of each product, as well as deception in the usability or risks arising from the

use of the product, is punished with imprisonment from one to three years and in writing from 50 to 100 thousand Tunisian dinars or with one of these two penalties. The penalty is increased to 7 years in prison with a written amount of 200 thousand Tunisian dinars, as these violations result in harm to human or animal health or the violations were such as organized crime.

Anyone who produces or displays spoiled food, animal food, or products that enable fraud, fraud, or incitement to use them by means of leaflets or advertisements shall also be punished by imprisonment from one to three years and in writing from 50 to 100 thousand Tunisian dinars, or by one of these two. The same penalty applies to every violation of the public commitment to health safety or every display on the market of a food item or animal food without making sure that it is safe and compliant, as well as every display on the market of a food item without obtaining a health safety certificate and the scale of penalties increases to 20 years if the party responsible for the presentation of the product on the market causes death or permanent disability (أولتراتونيزيا) .

IV. The importance of unifying the regulatory structures on food safety in Tunisia:

Effective control over food is vital to ensure its safety, thus avoiding the occurrence of diseases transmitted by it and sparing the health of consumers its negative effects, as well as preventing losses incurred by food enterprises, as food-borne diseases lead to many economic losses, such as loss of income, unemployment, litigation in the courts, damage to tourism, trade and investment and low morale among employees of food enterprises.

The challenge faced by the relevant regulatory authorities globally is to:

- Minimizing the risks.
- Continue to achieve excellence in the field of food safety.
- Support the ability of the food industry sector to adapt to modern technologies and the ability to survive in a competitive environment.

Therefore, global organizations and bodies emphasize that food safety is a shared responsibility of governments, producers and consumers. Each of them has a role to play, from the farm to the dining table, to ensure that the food we consume is safe and healthy (World Food Safety Day 2021 (who.int)).

In this context, the director of studies, research, analysis and comparative tests at the National Institute of consumption, **Darin Dokki**, confirms that "the institute carries out studies and research in all fields of consumption, performs comparative analyses and tests and provides technical support to all institutions concerned with the field of consumption, and also conducts scientific comparison operations between many products of the same type to provide all the data on the materials used in the food product.

Dokki adds, "a complete path to clarify the vision, relying on specialized laboratories, where the products are purchased confidentially, like any ordinary consumer, from ordinary routes, and then we carry out scientific analyzes and tests in order to identify the ingredients and determine whether they are harmful to health, and the results of the analyzes are sent to manufacturers, in order to improve the quality of the product and direct it towards fair competition" and in comparative analyzes, the consumer is "informed and rationalized his consumption and directed through the announcement of the components of food products that are subject to analysis".

Dokki considers that the institute recommended " the adoption of the nutritional index, which is the nutritional table that includes all the ingredients, including salt and sugars, in order to compare the nutrition between products, to contribute to improving the health safety of food.

In turn, the Consumer Guidance organization seeks to direct the consumer to foodstuffs that suit his purchasing power, that respond to his basic needs, and provide the necessary calories for humans without causing health damage.

In this regard, Lotfi Riahi, head of the Tunisian Organization for consumer guidance, stated that "the organization's concern today is the appropriateness of Tunisian legislation in the field of consumer protection with European and other legislation, and to inform the Tunisian consumer of all developments in the field of food safety," calling for "immediate information to the public opinion and the Tunisian consumer about every product withdrawn from the market in the world so as not to leak to the Tunisian market and protect the consumer.

The Tunisian Organization for consumer defense is a Tunisian Association of a socio-economic character that was established on February 21, 1989 and signed recognition as an association of national interest in accordance with Order No. 318 dated February 8, 1993.

The National Council of the organization consists of 15 members, the first of which was headed by **Habib garfal**, who also headed the Tunisian Organization for education and family. the association also has regional offices at the level of each state, one of which consists of 12 members; local offices at the level of accreditations and branches at the level of municipalities and rural centers.

Chapter II of the statutes of the organization states that the latter aims to take care of consumers in all fields and sectors, protect them, defend their interests, rationalize consumers and raise awareness about their safety and good behavior, in addition to representing consumers in all fields and levels and at various authorities. While Chapter IX of the statute states in Part Two, a new chapter, concerning the fields and sectors of consumption, that the organization is interested in all fields and sectors that provide products or services directly or indirectly with or without payment and benefit the citizen or affected by them.

The organization intervenes on behalf of the consumer in the event of disputes with the merchant and the service provider, and this intervention, known as mediation, has a consensual character and is based on a relationship of trust and responsibility. This approach gives priority to Agreement and mutual consent and is aimed at notifying the counterparty of the importance of cooperation with the organization, however, this approach does not preclude recourse to competent structures if mediation efforts do not yield the desired results. The organization says that in order to ensure that its interventions have the desired effectiveness for the benefit of consumers, it does not hesitate when it is urgently necessary to resort to justice to enforce respect for consumer rights.

Prevention through training and information on topics related to health and health safety is one of the important axes in the organization's work, which gives priority to prevention, and thus protecting the consumer from all risks that may harm his health and affect the family budget in an effort to enable the consumer to reach the rank of self-defense on scientific grounds. The organization also carries out its activities within the framework of religious events (Ramadan, the birth of the Prophet, Eid al-Fitr, sacrifice), School return, summer semester and other events of a special nature.

In order to communicate its messages and carry out its role in awareness and guidance, the consumer defense organization relies on the publishing information and sensitization brochures, the Tunisian consumer magazine, issuing communications and making statements in

the written press, in addition to conducting sensitization and information campaigns, seminars and demonstrations. However, a follower of the organization's activity can notice that this activity intensifies during events and holidays, while it almost stops to rest throughout the rest of the year. The organization also does not have special Consumer Guidance television programs, as is customary in many foreign channels, which devote about two minutes a day to addressing one of the topics of consumer interest.

On another level, the National Authority for the health safety of food products held its first meeting on March 31, 2022, under the supervision of Dr. Mohammed Rabhi, Director General of the authority, during which it stressed the need for mandatory enrollment of control agents in accordance with the Law No. 25 of 2019 on the health safety of food and animal food, and work to ensure food control at various stages of the food chain, including when supplying and exporting, in addition to supporting export opportunities and the flow of national food products in international markets, the National Authority for the health safety of food products under the law is the only regulatory structure for food and animal food In Tunisia, through the grouping of various control structures and observers dispersed among several ministries, which causes overlapping of roles and limited effectiveness of control activities in the national market and border crossings (2022, صحيفة الشروق).

Through the above, it is clear to us the diversity of food safety regulatory agencies in Tunisia, and all of them are aware of the necessity and imperative to unite their efforts in order to reach the maximum degrees of food safety, especially with the concerted efforts of the Tunisian legislature and government bodies to tighten control and control, especially with regard to imported and export-oriented materials, and the state's dependence on the tourism sector makes the issue of food safety in various tourist facilities a very important issue, especially as it coincides with the summer season where food poisoning abounds, and the degree of danger of processed foods not properly preserved increases.

Recommendations and conclusion:

At the end of our topic, we emphasize the seriousness of the Tunisian state in dealing with the issue of control over the health safety of foodstuffs, by defining its legislative and regulatory framework, with attention to the awareness aspect through various media and communication available locally, but these efforts remain scattered and unstable in light of the modernity of government bodies and agencies resulting from the change in the political situation of the country, and therefore to achieve the highest degrees of food security and safety, we propose the following recommendations:

1-the need to work on increasing and improving food safety information, and publishing it based on all communication and media means available nationally.

2-the need for better communication between all sectors of food activities and government authorities in matters related to the mechanisms of maintaining food safety, to reach a common approach, especially in critical and dangerous situations.

3-increasing the compatibility and harmony between government regulatory agencies and non-governmental organizations, and the importance of emphasizing the right of citizens to exercise health control, through reporting various forms of abuses carried out by food institutions.

4-increasing the number of laboratories and developing equipment for Food Control, and relying on information systems and digitization in the circulation of information related to food safety.

5-encouraging healthy nutrition and local production in accordance with international standards, and trying to reduce the length of the food chain from producer to consumer, especially during the summer, where cases of food poisoning increase.

– **Referrals and references:**

- General Foundation for Food and Medicine. (s.d.). Consulté le 05 20, 2024, sur www.jfda.jo/EchoBusV3.0/SystemAssets/PDF/AR/Topics/68_42.pdf
- Official Ride of the Republic of Tunisia No. 2019-024. (2019, February 26). Law No. 25 of 2019 on the health safety of food and animal food. *Title I, Principle of risk analysis(Chapter 8)*.
- Resources for the United Nations. (s.d.). World Food Safety Day. Consulté le 05 20, 2024, sur www.un.org
- The official Leader of the Republic of Tunisia. (2021, January 21). Order No. 74 of 2021 dated 21 January 2021, on the regulation of the administrative and financial regulation of the National Authority for the Health Safety of Food Products. (10), 301. Consulté le 01 29, 2021
- Tunisian Television. (s.d.). 17. Consulté le 05 25, 2024, sur www.news.tunisatv.tn
- World Food Safety Day 2021 (who.int). (s.d.). Consulté le 05 21, 2024, sur www.who.int/en/campaigns/world-food-safety-day/2021
- أسامة عبد الرحمن. (2011). *الأمن القومي وعلاقته بالأمن المائي والغذائي*. مصر: دار المعرفة والبركة.
- المرصد الوطني للفلاحة. (Fever, 2019). خطة ودراسة استشرافية حول الامن الغذائي وتنمية الصادرات في أفق 2030. 23. تونس: وزارة الفلاحة والموارد المائية والصيد البحري.
- أولتراتونيزيا. (بلا تاريخ). قانون السلامة الصحية.. ثورة تشريعية في القطاع الغذائي و"الأليكا" على الخط. تاريخ الاسترداد 05 27, 2024, من <https://ultratunisia.ultrasawt.com>
- بسام عبد الرحمان المشاقبة. (2015). *نظريات الاتصال*. الأردن: دار أسامة للنشر والتوزيع.
- سالم سلماني. (2020-2019). *السيادة والأمن الغذائي (نموذج الجزائر). أطروحة لنيل شهادة الدكتوراه في الحقوق، تخصص قانون عام معمق، ص138. الجلفة، الجزائر: جامعة زيان عاشور.*
- صحيفة الشروق. (2022, 04 01). *الهيئة الوطنية للسلامة الصحية للمنتجات الغذائية تعقد مجلسها الأول*. Consulté le 05 25, 2024, sur www.alchorouk.com
- قصوري مريم. (2012-2011). *الأمن الغذائي والتنمية المستدامة: حالة الجزائر. رسالة ماجستير تخصص اقتصاد التنمية، ص66. عنابة، الجزائر: كلية العلوم الاقتصادية وعلوم التسيير، جامعة باجي مختار.*
- محمد رفيق أمين حمدان. (1999). *الأمن الغذائي: نظرية النظام والتطبيق*. عمان، الأردن: دار وائل للنشر والتوزيع.
- يومية المغرب. (2023, 05 16). *مشروع تعاون فني ثنائي بين تونس وألمانيا في مجال السلامة الصحية للمنتجات الغذائية*. Consulté le 05 25, 2023, sur www.ar.lemaghreb.tn