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The Commitment of the intervenant to the safety of the consumer against biologically treated products

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Abstract
There are many applications resulting from scientific and technological progress in the field of industries and services, especially biologically processed and genetically modified products, so that these applications affect the life of the person who is considered the final consumer of these products. As these products are biologically treated they cause harm to the consumer in his environment and his skin directly, especially as these damages accumulate and appear only after a long period of acquisition and use of the product, making it difficult to treat their effects. So that it has become mandatory obligation to comply with the safety of consumers against the damage of products treated biologically.

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Introduction:

Free market theories has always dominated the course of the global economy, and the accompanying passion of merchants for competition and its challenges, due to their excessive reliance on chemical, organic and biological compounds in many of their products, in order to raise production rates as quickly as possible, and at the lowest prices, even if that Causes harm to consumer safety. In addition to the information technology revolution witnessed by various industries, which prompted merchants and manufacturers to make use of its various data, especially genetic engineering, which played a major role in creating many genetic modifications in plants, fish and animals, on which many food industries are based, in order to raise the level of production, but unfortunately it carries with it many serious repercussions on the health of the consumer, and the matter becomes more complicated when it comes to medicines, medical and pharmaceutical preparations, and cosmetics , Because

of its strong impact on its preservation and suitability for use, and because of its risks that directly threaten the security and safety of the consumer, and because the manufacturer often uses chemicals in the manufacture of many of these preparations.

On the other hand, it has been discovered that many electronic devices play a serious role in threatening consumer safety, because they are made of toxic materials, which greatly harms not only the people living near the factories that produce these devices because they rely in their manufacture on lead and chromium, which is known to have a toxic effect, as well as copper and Others, but even users of these products. what has increased the seriousness of the matter is that many industries have recently resorted to relying on nuclear energy as a source of energy, not caring about the danger of radioactive leaks that contaminate products and goods and consequently lead to a disruption of the natural balance within the tissues and cells of the consumer.

All of this is a result of the liberalization of international trade due to economic globalization revealed the inability of many national legislations to protect some of their gains, especially in the field of consumer protection. This is what led to the call to unify legal rules in the field of consumer protection at the international level to ensure equal treatment between merchants in different countries. This idea has gained great importance, especially in the field of consumer protection from harm from biologically treated products, as most goods and services are not commonly traded on an international scale, then Unifying the rules in this field must be done by setting a minimum level of controls that must be observed in this field, provided that the details are left to the rule of national legislation, and this is the approach followed by the European Union in this regard.

Hence, we see the inevitability of preserving the health safety of the consumer of biological products, especially in the face of the biologically harmful activities of merchants and manufacturers, after it was proven that the Arab legal systems - including the Algerian legal system - are devoid of legislation sufficient to protect the consumer in this field, especially after the percentage of the incidence of cancer in its various forms in our society, which has recently recorded unusual rates, which forces us to consider the importance of organizing a commitment to consumer safety of biologically treated products.

Therefore, the research problem revolves around the absence of a clear legislative vision for the interventionist's commitment to consumer safety of biologically treated products, which has caused this situation to raise several questions, the most important of which are:

What is the content of the intervener's commitment to consumer safety of biologically treated products?

Our research will address this through two sections. The first relates to the basis of the interventionist's commitment to the consumer's safety from the biologically treated product, and the second section relates to the controls of the interventionist's commitment to the consumer's safety from the biologically treated product.

Chapter one: The basis of the interventionist's commitment to consumer safety from the biologically treated product

Biologically treated products are newly created products resulting from scientific and technological applications progress in the field of various industries, which prompted professionals and stakeholders to make use of technological revolution, especially genetic engineering, with the aim of raising the level of production due to the advantages offered by these biologically treated products in terms of abundant production and low costs to fulfilling consumers' desires. But on the other hand, these biologically treated products cause environmental damage that is difficult to remedy, in addition to their health damage that affects humans. The most dangerous thing is that these damages accumulate and do not appear until a period of time after their use. Hence, the recent damage resulting from biologically treated products has led to raising the problem of the basis of the intervenor's obligation to protect the consumer against this harm, and whether this obligation comes from the law or the contract.

Hence, we need to define the effect of the biologically treated product and explain its applications in commercial transactions, then address the source of the interventionist's commitment to the consumer's safety from the biological product.

The first requirement: The nature of the effect of the biological product and its applications in commercial transactions.

We will discuss the definition of the harmfulness of a biological product; highlight its characteristics, its reflection on the legal relationship between the intervener and the consumer, and its most important applications in commercial transactions.

The first section: Definition of the damage of the biological product and its characteristics:

1/ The concept of the damage of biologically treated products:

The effects resulting from biologically treated products are multiple and take a variety of forms, so we must search for the concept of this type of legally considered damage and determine its characteristics. However, what we noticed through our research is the lack of definitions that have been subjected to this damage, and this is due to the recent spread of damage to biological products. There are few legal studies that have dealt with regulating the responsibility for exposure to this damage in the relationship between the intervener and the consumer.

One of the most important definitions that address this damage is the text of Article 27 of the Biosafety Protocol as: "harm resulting from transboundary movements of living modified organisms," as defined by the US Environmental Protection Act CERCLA as: "damage that leads to the destruction of a natural resource."

What is noticed from these definitions is that they consider the damage resulting from biologically treated products to be a form of defect that afflicts the system of utilizing natural environmental resources, but they neglected that this damage has now affected humans as the final consumer of these goods and services, and therefore a distinction must be made between the biological damage that is caused To the environment in one of its elements, and the damage directly caused to humans, causing a defect in their vital functions.

Some commentators of civil law also went on to drop the general theory of damage on biological damage, considering that material damage is a violation of the interest of the effected person of financial value or harm or diminution of a right or material interest, and since the damage results in an infringement on human rights and capabilities, so that infringement causes an organic defect that results in the loss of those components or their complete loss, and may lead to harm the affected person's professional abilities. Hence, the material damage can be a serious harm to a person's health as a result of his eating food made from biologically processed or genetically modified products, which may cause allergies. Or taking the patient as a consumer of molecular therapy using genetic engineering may lead to transforming diseased cells into cancerous cells or disabling one of the genes that perform essential work for the human body.

It may also be included within the scope of the concept of damage resulting from a biological product, the moral damage resulting from a person eating genetically modified food, which leads to his contracting organic diseases and morphological deformities. Here, the harmful act may result in a moral damage.

2/The characteristics of the biologically treated product damage:

Biological damage is characterized by special features that distinguish it from other damages affecting the consumer, which have legal repercussions, which are as follows:

- **Difficulty in monitoring damage in biologically treated products:** Since biological damage is of a hidden nature, it is difficult for the consumer to notice and detect it when he eats the product or receives the service. This is due to the fact that biological materials are microscopic bacteria, viruses, or radiation that is difficult to see with the naked eye, It cannot be perceived by smell or touch, even if this product causes harm to humans, it is difficult to prove it if the consumer wants to impose responsibility on the intruder for the harm he has encountered.

- **The slow effects of damage from a biologically treated product:** The effects of biological damage may not appear immediately on the consumer, and this damage can also be transmitted to his heirs after him, and this is what makes the effect of this type of damage not limited to the present only, but may extend to future generations.
  As confirmed by the Carthage Protocol on Biosafety, the effects of biological damage cannot be observed except after long periods of time after eating the commodity or using the biologically treated product. This was explicitly confirmed by the French Court of Orleans in the "Monsanto Company" case when it held that biological damage would leave negative effects on biodiversity, the size and nature of which would be difficult to determine except over the coming years.
  On the one hand, this characteristic has raised several problems, regarding the extent to which the supplier's responsibility ends after the good or product crosses the borders of the country to which it is supplied, and on the other hand, the difficulty of proving the causal relationship between the intervening error and the damage that occurred, due to the passage of a long period of time between the occurrence of the accident and its discovery
- **Difficulty in determining who is responsible for the damage to a biologically treated product:** Biological damage is characterized by the difficulty of determining its source, and this is due to the multiplicity of those involved in the production of the commodity, as the products pass through several stages and through many people (producer - importer - distributor - wholesaler - retailer) until they reach the consumer, and this leads to difficulty identifying the person responsible, and thus raises several problems, the most important of which is the difficulty of proving this damage and the difficulty of identifying who is responsible.

The second section: Applications of the biologically treated product to commercial transactions:

Biotechnologies that are used in various industries are considered to be various types of cells and organisms (bacteria, viruses, fungi...), or complexly combined radioactive materials, which affect the consumer's health in general. But not all of these biotechnologies can be used industrially or have application in commercial transactions, and from here we will shed light on the most important technologies used in these fields:

1/ Genetically modified organisms (GMO): What has been observed recently is the increase in the process of introducing organisms with a specific genetic content to produce goods with improved characteristics in a new way. This method has received the lion's share in many industries, especially in the production of agricultural crops, seeds, and agricultural and food products.

2/ Mutations: They are a sudden and continuous change that occurs in the genetic makeup of an organism, leading to the emergence of a new, different generation.

3/ Tissue culture: It is the cultivation of any plant part in an environment that is artificially fed, sterile and free of pollution.

4/ Biotechnologies: They are methods of using living organisms in order to modify the manufacture of some goods to improve their quality or to produce goods bearing desirable characteristics, or vice versa, through genetic engineering.

5/ **Biological compounds:** These are the compounds that are usually used as preservatives, including:

ATIC compound: It is considered a food preservative, and it has been shown that it is abundant in common foods. It has been proven that this compound is considered a carcinogenic and toxic substance and causes a defect in the DNA strand, and inhaling it may cause cancerous tumors in the lung.

Olestra compound: It is a manufactured food additive consisting of sugar and fat. It was approved by the Food and Drug Administration in USA in 1996 as a food additive for use in snacks such as cornflakes. However, this compound should not be overused, and foods that contain this compound must carry adequate warnings indicating its negative effects, such as diarrhea, intestinal cramps, and withdrawal of vitamins from the body.

Mycoprotein compound (Quorn): It is a type of fungus that is used in the manufacture of protein-free meat. Although this compound is placed on the list of safe food compounds, it has been proven that its excessive use causes diarrhea, vomiting, and skin rashes, and may lead to death.

RF/MW radiation: It is considered one of the most common causes that lead to the consumer suffering from biological damage when exposed to this radiation, as a result of eating some foods or using some substances (preparations - medicine -...) due to the possibility of malfunctioning the functions of devices inside the body and causing cancer.

The second requirement: The source of the intervener's commitment to safety against the biologically treated product:

In Law 03/09 relating to consumer protection and suppression of fraud, the Algerian legislator mentioned that the rules of this law apply in the field of consumer protection, and to every good or service offered for consumption in return or for free and to every intervener in all stages of the process of offering for consumption. Through this law, the Algerian legislator, in its Article 3, Paragraph 06, defined product safety as: "The complete absence or presence, at acceptable levels and without danger, in a food substance of contaminants, adulterated substances, natural toxins, or any other substance that can make the product harmful to health in an acute or chronic manner." Then added in paragraph 11 of the same article that: "A sound, fair, and marketable product: a product free from any deficiency and/or hidden defect that guarantees no harm to the health and safety of the consumer and/or his material or moral interests."

We perceive from this text that the Algerian legislator recognized the application of the rules of this text in the field of consumer protection, and to every intervener in all stages of the process of producing and displaying goods for consumption, and thus expanded consumer protection, especially by defining the safety of products and those that are marketable by being free of any defect; Which may lead to it compromising the safety and health of the consumer, causing him material or moral harm. Therefore, we conclude from the text that the basis of the intervener's commitment to the consumer's safety is the law. It then follows that the contract between the intervener and the consumer stipulates this obligation or not, and this matter was confirmed when Article 19 stipulates in paragraphs 2 and 3 of Law 18/09 amending and supplementing Law 09/03 that: "withdrawal is the consumer's right to withdraw from the purchase of a product without just cause. The consumer has the right to refrain from purchasing a product within respect of the terms of the contract."

However, this law did not specify what is meant by a product that is safe and safe for the health of the consumer, and did not regulate the specifications that must be met to ensure that the biologically treated product is

free from biological harms, which may be understood as saying that the scope of the intervener's commitment to safety stops at the limits of traditional harms, Especially if the intervener maintains that the biological damage is not classified as among the conventional damages, whether in terms of the methods of its detection or in terms of the size and type of damages resulting from it, and therefore it is difficult here to say that the basis of the intervener's commitment to the safety of the consumer of the biologically treated product is the law**. Can we consider the basis of this obligation to be the contract?** However, in practice, this is difficult because the party involved does not accept the commitment to safety against biological damage under the contract because he always seeks to evade obligations that would burden him towards the consumer.

At the international level, European directives have imposed many obligations that the intervener must take into account in general regarding the safety of goods and products offered for consumption, foremost of which is what was stated in Article 1, Paragraph 3 of European Directive No.: 2001/95/EC that The producer is committed to putting only safe products on the market, and Paragraph 2 of it was keen to specify when a product is considered safe, which is if it meets the specifications and standards stipulated in Article 4 of the same directive. If they are not sufficient, then what matters is what is stated in the national law of the country in which the product is marketed.

What is noted from the texts of the European directive is that it addressed the intervener's commitment to safety in general, without addressing biological damage with a specific provision. This indicates a deficiency in these directives, as evidenced by the damage to which consumers in some European countries were exposed, In 2004, a safety test was conducted on 98 products offered in European markets (such as children's toys, lighters, laser pointers, involuntary reflectors, candles, etc.), and it was found that 25 of them contained biological harmful substances, and that 27 of them were susceptible to becoming a defective product.

The thing that increases the seriousness of the matter is pharmaceutical products, especially since the institutions responsible for producing a defective drug evade responsibility by claiming that there is no legal text obligating them to be safe against biological damage, and that they are not linked to the consumer (patient) by any direct contractual relationship, This often exposes the injured party to not meeting the conditions of the compensation claim. However, the French judiciary was keen to confront these challenges by establishing the principle of "safety precaution" in accordance with Article 1135 of the Napoleonic Code, which stipulates that contractual obligations are not interpreted in light of the letter of the texts or clauses of the contract, Rather, it is interpreted according to the implicit will of the contracting parties and what is required for proper implementation of the contract in light of prevailing customs. The Court of Cassation ruled in application of this in its ruling issued in 1998 that drug producers must ensure that they are free of defects that pose a danger to people or property. It is clear from this ruling that it is intended to establish a supposed legal obligation, obligating the intervener to take into account the consumer's safety against biological damage, regardless of the existence of a contractual relationship between him and the consumer.

In response to the above, it seems clear that the basis of the intervener's commitment to the safety of the consumer against the biologically treated product must be the law and not the contract, because there is no room in consumption contracts in particular to leave such an obligation to the will of the parties Because the intervener quickly repudiates and forces the consumer to accept the contract free of this obligation, and on the other hand, there are multiple interveners who contribute to the product reaching the hands of the final consumer, making it difficult to say that there is a direct contractual relationship between the consumer and them ,Therefore, it is difficult to rely on the contract to cover this obligation. In addition to the seriousness of biological damage, the general texts regulating the consumer safety obligation are not sufficient, and therefore we need special texts that address the precise details of this obligation.

Chapter two: Controls for the Interventionist's Commitment to Ensure Consumer Safety from the Biologically Treated Product

Since the obligation to be safe is the debtor's pledge to implement his obligation without harming the creditor, and in order to establish this obligation two conditions must be met. The first is that the relationship involves a danger that threatens one of the parties - and this is the justification for the existence of the obligation to be safe. The second - that the debtor of the obligation must be a professional - and this is what this obligation requires, that it requires from the debtor more care and diligence, and that he has high experience that enables him to exercise care and diligence that exceeds the care and diligence of the average person, Also, the term Biosafety refers to the procedures adopted to ensure the safe use of biotechnology applications, and the biological safety controls to protect the health and safety of the consumer, which requires the intervener to use food and environmental standards to ensure consumer safety, This is what we seek to achieve by presenting the most important controls for the interventionist's commitment to consumer safety of the biologically treated product.

From here, we will first address the interventionist's obligation to provide a biologically safe product, and then we will address the interventionist's obligation to inform the consumer of the nature of the effects resulting from biological materials.

The first requirement: The interventionist's commitment to provide a biologically safe product:

Biologically treated products are classified as inherently dangerous products, because the danger is inherent in them, and thus they differ from defective products to which the danger is inherent. Hence, we must separate between the safe product, even though it contains biological materials, and the biologically harmful product, Hence, we must first address the measures that the intervener must take into account in order to provide a sound biologically treated product, and the amount of care that the intervener must exercise in this aspect.

Section One: Measures that the intervener must take into account in order to provide a sound product:

The most important measures to ensure the provision of a safe biologically treated product are:

1/Ensuring the availability of standards that prove that the product is free from biological harm: These standards must be regulated by internal laws, and should not be left to contractual negotiations between the intervener and the consumer due to the possibility of the first party repudiating them.

The Algerian legislator stipulated in Article 4 of Law 09/03 relating to consumer protection and suppression of fraud that every intervener, when placing food for consumption, must respect the obligation of the safety of these materials, and ensure that they do not harm the health of the consumer. The concept of microorganisms (viruses, bacteria, yeasts, fungi...) was specified in Executive Decree 15/172, which specifies the conditions and methods applied in the field of microbiological characteristics of nutrients.

The concept of microorganisms (viruses, bacteria, yeasts, fungi...) was specified in Executive Decree 15/172 specifying the conditions and methods applied in the field of microbiological characteristics of nutrients. Then define the microbiological characteristics in Article 3, Paragraph 2, of the aforementioned Executive Decree and consider them to be the criteria to be applied to nutrients in order to ensure respect for the hygiene and safety of nutrients during their placement for consumption. and added in Paragraph 3 of the same article that microbiological standards are the standards that determine the extent of acceptability of a product, a portion of its nutrients, or a method on the basis of the absence or presence of microorganisms or the quantity of their toxins..., and consider The security standards for nutrients in Paragraph 4 of the same article to be the standards that determine the extent of acceptability of a product or share of nutrients applied to materials offered for sale. As stated in the text of Article 08 of Executive Decree 15/172 mentioned above, "The party involved in the process of placing nutrients for consumption must ensure respect for microbiological standards..."

The legislator added that these standards will be determined according to a decision of the ministers in charge of consumer protection and the suppression of fraud, agriculture, health... We note that the Algerian

legislator tried to give an understanding of the standards that determine the extent of the health and safety of the product offered to the consumer in order to prevent the emergence of any microbiological risk, and the scope of determining these standards is left to the ministers in charge of consumer protection, each according to his specialty and field.

At the international level, there are no unified standards regulating the rules for assessing the risks of biologically treated products or genetically modified organisms, despite cooperation between many international bodies to classify substances and compounds that affect consumer health and safety, such as the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the Carthage Protocol on Biosafety ,these systems did not set standards for evaluating biological harm, and instead defined a safe product in general, without specifying a distinct definition for a biologically safe product. Because according to the text of Article 6 of European Directive No. (1985/374/EC): A product is considered safe if it does not cause harm to the consumer according to his expectations: taking various circumstances into account, such as the way it is presented, its use in the expected manner, and the time in which it was put into circulation.

It is clear from the above that sufficient criteria have not been specifically determined to be considered biologically safe, because it is difficult to detect a biologically harmful product from the way it is presented or packaged, Given that biological organisms and compounds are impossible for the consumer to perceive with his normal senses, because these compounds and organisms are heavily involved in the composition of the product and improving its quality, shape and texture in a way that attracts the consumer to use it, in addition to the fact that the biologically treated product does not show its effects until after continuous use of the product or service.

2/ Comparing the advantages and disadvantages of using biological material in the product: Note that many industries rely heavily on biological materials, and therefore the goods containing a biological material or component is not considered harm in itself, However, the interventionist must compare the benefits and disadvantages of this biological substance from an economic and social perspective, and the seriousness of the potential risks of its use. For example, some medications that contain biological compounds are necessary to treat a serious disease such as cancer, but at the same time they have a side effect in other matters such as hair loss.

3/ We do not rely on the consumer's personal ability to evaluate the safety of the product: the interventionist must not rely in evaluating the biologically treated product on the consumer who owns that product, even if data regarding the components of the product are written and shown on its packaging (label),Because most consumers do not have the culture of paying attention to the label and reading the components of the product, and even if they did, the consumer often does not have the ability to understand the nature of these compounds or their effect, and therefore the intervener must take samples of the product and conduct laboratory tests on it Before offering it to the consumer, this is what was stipulated in Article 09 of Executive Decree 15/172 mentioned above, taking into account the methods of risk assessment by the competent international organizations according to Article 10 of the same decree.

Section two: The standard of care that the intervener must exercise to provide a biologically treated product that does not harm the consumer:

There are two standards to measure the care that an interventionist must exercise when he is in the process of implementing the standards required of him to provide a biologically treated product free from biological harm, which are the personal standard and the objective standard.

1/ Personal standard: According to this standard, in order for the intervention issued by an action to be considered a violation of taking the necessary standards to provide a biologically safe product, the person must personally know that he has performed an action or refrained from an action that entails a violation, and that practicing this action would harm the consumer. It is noted that adopting this personal criterion would narrow the scope of cases in which the merchant's behavior would be considered a mistake or a violation of the implementation of his

obligations, due to the difficulty of proving the presence of this knowledge on the part of the intervener, considering that the subject of proof is an intangible psychological issue.

2/ Objective standard: This standard is based on measuring the intervener's knowledge of the possibility of biological harm occurring when the consumer acquires the biologically treated product, in light of a fixed standard previously defined, which is the standard of the careful man or the careful intervener in the same circumstances and competence as the intervener, regardless of the interventionist's personal psychology. So, it is assumed that the intervener is aware of the possibility of biological damage occurring if the person is careful in the same circumstances and competence as him.

Many legislations, including Algerian legislation, in the process of defining a safe product, have sought to clarify the role of consumer expectations as one of the measures that must be taken into account when assessing the interventionist's commitment to safety. So the legislator stipulated in the text of Article 09 of Law 09/03 related to consumer protection and suppression of fraud that products intended for consumption must be guaranteed and have security in view of the legitimate use expected of them. With that it does not cause harm to the health, security or interests of the consumer, within the normal conditions of use..., and he added in Article 10 of the same law that every intervener must respect the obligation of the security of the product that he puts for consumption with regard to:

- Its features, composition, packaging, and conditions for assembly and maintenance - The effect of the product on other products when it is expected to be used with these products - The presentation of the product, its labeling, and possible instructions for its use and destruction, as well as all instructions or information issued by the product - Categories of consumers who are exposed to serious danger as a result of using the product, especially children.

At the level of judicial definitions, the French Court of Cassation defined a safe product as: "a product free of defects that pose a danger to people, according to the degree of care and care expected from the intervener."

In this regard, the French Court of Cassation adopted an expanded interpretation, which would open the horizon for the consumer to expect whatever he wants regarding the interventionist's commitment to safety, as it explicitly decided that: The product must provide the safety that is expected to be provided by it. However, for our part, we do not agree with this ruling, since it gives free rein to evaluating the consumer's expectations in his personal assessment of the safety of the product, but it is preferable for the evaluation to be made according to the objective standard, which is the standard of the average consumer or what the general public expects.

The second requirement: The legal nature of the intervener's obligation to inform the consumer:

There have been conflicting opinions about the legal nature of the intervener's obligation to inform the consumer. There is a judicial side that believes that this obligation is an obligation to achieve a result and not an obligation to exercise care. This is because the intervening producer cannot adhere to the dangers of the sold commodity (especially biologically treated products, as they contain dangerous biological and chemical materials and compounds).

As for another aspect of the law's explanations, it believes that this obligation is an obligation to exercise care, because the intervener does not control the outcome of the advice he provides to consumers; nor oblige them to follow it, as this obligation is achieved by the intervener making the appropriate effort to inform the consumer. The obligation to exercise diligence as a standard for measuring the intervener's commitment to the media has witnessed great development, especially in recent times. It has become determined in light of the risks associated with the activity carried out by the obligor, which requires him to analyze the risks surrounding and expected in his activity, and then he must exercise care commensurate with the size of these risks, according to the standard of a professional in dealing with biologically treated products.

As for the Algerian legislator, the dispute was settled under Law 09/03 relating to consumer protection and the suppression of fraud, mentioned above and consider The intervening obligation to inform the media an obligation to achieve a result by arranging a criminal penalty in the event of a violation of this obligation imposed on the intervening parties, even if no harm results to the consumer as a result of his acquisition of the product. As for the event that the product causes harm to the consumer, here civil liability is determined in addition to criminal liability (see Article 78 of Law 09/03 relating to consumer protection and suppression of fraud).

Conclusion:

Through this research, we sought to highlight the concept of legal safety and security in protecting the safety and health of consumers from biologically treated products. Especially after the high rates of cancer throughout the world and in the Arab countries and Algeria in particular, and other diseases that are transmitted to the consumer through his consumption of biologically processed and genetically modified products. Especially after the stakeholders became heavily dependent on biological materials in the industry in order to increase production and improve its quality for greater competition, not caring about the diseases that could affect the consumer Who has become prey to the temptations of technology and dazzling advertisements without knowing the health implications of the products he consumes. Hence, we sought to develop a legal regulation that addresses the intervener's commitment to consumer safety against the harms of biologically treated and genetically modified products. Especially that Algerian law in general and the Consumer Protection Law in particular lack a clear legislative treatment for this type of obligation, and are satisfied with the general texts that regulate the commitment to safety in general. We have been keen to clarify the concept of harm caused by biologically treated products, out of our desire to understand its nature, legal characteristics and the most important industrial applications of biological compounds To demonstrate the importance of specifying the dimensions of the intervener's commitment to safety against biological harm, we were also keen to consider that the law is the source of this obligation because the consumption contract cannot be relied upon as a source of the intervener's commitment to consumer safety against biological harm. Hence, we concluded our research with a set of results, the most important of which are:

- The importance of legal protection for the consumer against harm from biologically treated products, despite the importance of benefiting from biotechnology data and the applications of genetic engineering in industrial fields.
- There is a clear deficiency in national legislation regarding regulating the intervener's responsibility for compensation for biological damages.
- The difficulty of proving harm in biologically treated products and the nature of its effects on the consumer.

This research also concluded a set of recommendations, the most important of which are:

- National legislation must adopt laws that achieve a balance between considerations of consumer protection against the risks of harm from biologically treated products, and considerations of enabling the intruder to benefit from biotechnology data, to help him compete nationally and internationally.
- Legal legislators must formulate clear legal texts obligating the intervenant to protect the consumer against harm caused by biologically treated products, and not leave this to the agreement between the intervenant and the consumer in the consumption contract.
- Legal texts must be put in place that specify the specifications of the biologically safe product, and some kind of control must be exercised over the activity of those involved in observing these specifications, whether when manufacturing the product or trading it in the market.
- Liability for damage resulting from a biologically treated product must be attributed to the intervening party, the producer and manufacturer of the commodity; unless an intruding cause is proven.

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