

## Important updates introduced by the new regulation on the industrial and sanitary inspection of products of animal origin: Decree no. 9013 of March 29, 2017

### Atualizações importantes introduzidas pelo novo Regulamento de Inspeção Industrial e Sanitária de Produtos de Origem Animal: Decreto n° 9.013 de 29 de março de 2017

#### ABSTRACT

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**Introduction:** Various legal devices regulate the food hygiene inspections of animals origin in Brazil. Among the most important legislation was Decree no. 30,691, of March 29, 1952, which was replaced on March 29, 2017, by Decree no. 9,013. **Objective:** Thus, considering the relevant importance of this regulation for national agribusiness and consumer health, the present work aimed to evaluate the updates and changes of the new regulation in comparison to its predecessor. **Method:** For this purpose, a revision of the legislation on health inspection published by the federal government was carried out, through the search of databases in federal government portals for a better understanding of the subject and as a comparative form. **Results:** The new regulation is less robust than its previous one, presenting 542 articles. The main updates innovations were the insertion of degrees of risk in establishments, simplification of labels and stamps, more modern laboratorial analysis such as molecular biology, distinction of requirements according to the size of production, more severe penalties for companies which break the law, concern for animal welfare and the environment. **Conclusions:** In this way, updating the regulation was necessary, and brought important innovations with modern concepts, new technological processes and food safety, better suited to the current reality of Brazil.

**KEYWORDS:** Food Legislation; Food Hygiene Inspection; Products of Animal Origin; Federal Inspection Service

#### RESUMO

**Introdução:** A inspeção industrial e sanitária dos produtos de origem animal brasileira é regulamentada por diversos dispositivos legais. Dentre as legislações mais importantes, encontrava-se o Decreto n° 30.691, de 29 de março de 1952, que foi substituído em 29 de março de 2017, pelo Decreto n° 9.013. **Objetivo:** Assim, vista a relevante importância deste regulamento para o agronegócio nacional e saúde dos consumidores, o presente trabalho teve como objetivo avaliar as atualizações e mudanças do novo regulamento em comparação ao seu antecessor. **Método:** Para isso, foi realizada uma revisão da legislação sobre inspeção sanitária publicada pelo governo federal, através da busca em bases de dados presentes em portais de órgãos do governo federal para um melhor entendimento da temática e como forma comparativa. **Resultados:** O novo regulamento é menos robusto que o seu anterior e apresenta 542 artigos. As principais atualizações foram a aplicação de análise de risco na inspeção dos estabelecimentos, a simplificação de rótulos e carimbos, as análises laboratoriais mais modernas como a biologia molecular, a distinção das exigências de acordo com o tamanho da produção, a maior severidade nas penas para estabelecimentos infratores e a preocupação com bem-estar animal e com o ambiente. **Conclusões:** Dessa forma, a atualização do regulamento era necessária e trouxe atualizações importantes com conceitos modernos, novos processos tecnológicos e de segurança alimentar, adequando-se melhor à realidade atual do Brasil.

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## INTRODUCTION

The inspection of products of animal origin is a very important topic for the agricultural and consumer sectors. Its historical evolution follows the technological and industrial developments of animal products and advances in food safety. Concerning the sanitary inspection of products of animal origin, we used to have the National Industrial and Sanitary Inspection Regulations for Products of Animal Origin (Riispoa), approved by Decree n. 30.691 of March 29, 1952<sup>1</sup>.

While the former Riispoa was in force, the sanitary inspection of products of animal origin underwent two important changes through other legal provisions that did not properly amend Decree n. 30.691/1952. These provisions were Law n. 5.760, of December 3, 1971, which established the federalization of the inspection service because of shortcomings in the inspection services of the municipalities and states, and Law n. 7.889, of November 23, 1989, which, on the contrary, decentralized the inspection between the three administration levels (Federal, State and Municipal), a change resulting from the Brazilian Constitution of 1988<sup>2</sup>.

On March 29, 2017, on the date that Decree n. 30.691/1952 would have reached the age of 65, and in the midst of the crisis of the sector as a result of the “Weak Flesh Operation” enforced by the Brazilian Federal Police, Decree n. 9.013 was published, introducing the new Riispoa<sup>3</sup>, in accordance with Law n. 1.283 of December 18, 1950, and Law n. 7.889/1989.

It is worth noting the influence of the *Codex Alimentarius*, from the Food and Agriculture Organization of the United Nations (FAO) and the World Organization for Animal Health (OIE), as references for the regulation of standards for the creation of the new Riispoa. Furthermore, the publication of new regulations was already demanded by several sectors, like small establishments that required more flexible laws to make their production more viable, and large establishments that asked for greater autonomy in inspection-related matters.

The new regulation bears important measures such as: authorization to use more up-to-date tools in inspections, application of degrees of risk to the establishments, issuance of registrations in non-bureaucratic ways, simplification of stamp and label templates, severity in the punishment of infringing companies, requirement levels that are appropriate to the size of each company, sophisticated analyses of molecular biology and better waste management in order to protect the environment<sup>4</sup>.

Since the changes introduced by the new Decree n. 9.013/2017<sup>3</sup> directly influence the Brazilian economy and the health of the consumers, both domestically and abroad, and because of concerns about animal welfare and the environment, this paper aimed to evaluate the updates introduced by the new Riispoa in a comparative study of the main changes of Decree n. 9.013/2017<sup>3</sup> in relation to the previous one, noting the reasons that led to its publication and its impact on the various sectors of Brazilian agribusiness.

## METHOD

As a review of the literature, the authors brought together various bibliographical references, ranging from legislation to scientific articles, in order to justify the publication of the new Decree n. 9.013/2017<sup>3</sup>, which approved the new Riispoa.

The references used in this paper were not selected in a systematic way, but in such a way as to give an overview of the changes introduced by the new regulation. These references were found in the databases of the Federal Planalto, Câmara dos Deputados, Ministry of Agriculture, Livestock and Supply (MAPA) and in different scientific databases. The search for references was done continuously between April 2017 and October 2017, and there was no limitation of publication date for the selection of references.

## RESULTS AND DISCUSSION

### Overview of the previous regulation

The history of the legislation that is relevant to the inspection of products of animal origin is very dynamic and has undergone several changes as a result of increased production and exports of food of animal origin. Animal production has been growing fast since the enforcement of the aforementioned legislation, showing the agricultural potential of Brazil<sup>2</sup>. Among the most diverse laws published in the course of history, Decree n. 30.691/1952, which approved the previous Riispoa and which was based on Decree n. 29.651, of June 8, 1951, stands out. It approved the first Riispoa, referring to art. 9 of Law n. 1.283/1950.

Law n. 1.283/1950<sup>5</sup> is considered by many to be the “Mother Law” of the inspection of products of animal origin in Brazil. It was regulated by Decree n. 30.691/1952<sup>1</sup> and now by the new Riispoa approved by Decree n. 9.013/2017<sup>3</sup>.

The previous Riispoa<sup>1</sup> was published with 952 articles, which have been amended over time. The decrees that amended the previous Riispoa were the following:

- Decree n. 39.093 of April 30, 1956, which amended 73 articles<sup>6</sup>;
- Decree n. 1.255 of June 25, 1962, which also amended 235 articles, of which 12 were completely deleted<sup>7</sup>;
- Decree n. 66.183, of February 5, 1970, which revoked art. 509 of Riispoa, in order to align it with Decree-Law n. 923, of October 10, 1969, on the marketing of raw milk<sup>8</sup>; .
- Decree n. 73.116, of November 8, 1973, which added the competence of the Ministry of Agriculture to Riispoa<sup>9</sup>;
- Decree n. 1.236 of September 2, 1994, which amended art. 507 on the types of drinking milk<sup>10</sup>;
- Decree n. 1.812 of February 8, 1996, which amended drafts concerning milk and dairy products<sup>11</sup>;



- Decree n. 2.244 of June 4, 1997, which amended Riispoa provisions considering Brazil's accession to the Treaty of Asuncion, which created the Common Market of the South (Mercosur)<sup>12</sup>;
- Decree n. 6.385, of February 27, 2008, which reworded articles 854 and 918 of Riispoa<sup>13</sup>;
- Decree n. 7.216 of June 17, 2010, which reworded articles 1, 3 and 14;
- Decree n. 8.444, of May 6, 2015, which regulated the establishments that must have permanent supervision<sup>15</sup>;
- Decree n. 8.681, of February 23, 2016, which revoked art. 843 and amended 25 articles<sup>16</sup>.

Decree n. 30.691/1952<sup>1</sup> was used for 65 years as the regulatory framework for the industrial and sanitary inspection of animal products throughout the Brazilian territory. It was considered modern and innovative upon its launching and it helped Brazilian products to achieve international recognition. Nevertheless, over the years, there have been numerous updates on research in the area and new needs of the agroindustrial sector. This created the urge for an update of this regulation to meet the needs of today's economy. Thus, although there have been studies to review Riispoa since 2007, this revision process has been expedited as a result of the crisis generated by the "Weak Flesh Operation" enforced by the Brazilian Federal Police.

### Overview of the new regulation

After a long period of pressure from agribusiness sectors and government promises, the Agricultural Defense Plan, launched in 2015, had the modernization of Riispoa as one of its objectives. This began on the same day of the launching of the plan, with the publication of Decree n. 8.444, of May 6, 2015<sup>15</sup>, which amended art. 11 of Decree n. 30.691/1952<sup>1</sup>. In 2016, there was a restructuring of the Department of Inspection of Animal Products (Dipoa) with the creation of the Coordination of Risk Characterization and Evaluation Division of Technological Innovations under the General Coordination of Special Programs. These changes were considered important to support the upcoming Riispoa updates. After that, only Decree n. 8.681/2016 was published, thus, a slow update occurred. In effect, the full revision would only take place on March 29, 2017, with Decree n. 9.013<sup>3</sup>, which revoked the previous Riispoa.

The "Weak Flesh Operation" was launched on Friday, March 17, 2017, and focused on localized irregularities identified in the Federal Inspection System (SIF), for possible crimes of corruption by public officials<sup>17</sup>. Although the problem was localized, it generated an international concern about the credibility of Brazilian meat. Therefore, to demonstrate the concern of the Brazilian Government and mitigate the crisis in our agricultural sector, the new Riispoa was launched, bringing modern concepts for inspection and more severe penalties for infringing companies.

The new regulation came with several points of relevance. Among them we can cite the following topics published by the MAPA:

- Authorization for the use of more updated tools in the inspections;
- Adoption of degrees of risk for the establishments;
- Non-bureaucratized registration issuance;
- Simplicity in the models of stamps and labels;
- Greater severity in the punishment of infringing companies;
- Requirement level according to company size;
- Sophisticated molecular biology analyzes;
- Better waste management<sup>4</sup>.

This Riispoa has fewer articles (542) than the previous regulation (952), which demonstrates that its wording is objective and concise. It also specifies that other procedures are to be found in complementary norms. Additionally, its main objectives are related to ensuring the quality and safety of products, with one focus being the fight against economic fraud. As a result of the fight against fraud, there was a redefinition of sanctions and penalties for infringing establishments.

There were also updates of concepts and terms that were inadequate, such as contamination flora and germs, and greater detailing of the collection and shipment of material for analysis in the National Agricultural and Livestock Laboratories (Lanagro). The inspection gained another ally with the routine use of molecular biology analyses, such as the deoxyribonucleic acid (DNA) test, among other methodologies established in recent years<sup>4</sup>.

The previous Riispoa treated all industries in the same way, often making it very difficult to legalize small producers because of the high level of demands. With the launch of the new Riispoa, a requirement specification was made according to the size of the production, thus strengthening small local producers and making their legalization possible. There was also the inclusion of the "establishments of products of small animal origin" expression, which is good because it adjusts the requirements to the physical structure and the equipment available at each establishment.

The forms of permanent and periodic inspection in establishments were maintained in the new Riispoa. The federal inspection will be permanently installed in establishments of meat and meat products that slaughter different species of livestock and game<sup>3</sup>, and it is to be done periodically in other establishments. According to Internal Rule Dipoa/DAS n. 1, of March 8, 2017<sup>18</sup>, the inspection will be permanent in these establishments due to the sanitary risk involved in slaughtering activities (*ante* and *post mortem* inspection).

With the publication of the new Riispoa, the greater responsibility of the producing establishment and not of the inspection body becomes more explicit. Establishments may only market and distribute products that do not pose risks to public health and that have not been modified or defrauded and that are traceable<sup>3</sup>.



## Data analysis

The first amendment relating to meat concerns the classification of establishments, which has been simplified. Previously, meat and dairy establishments could be classified as slaughterhouses-meatpackers, slaughterhouses, slaughterhouses for small and medium-sized animals, meat-drying factories, canning factories, pork factories, fat factories, meat and meat product warehouses, non-edible product factories, poultry and rabbit slaughterhouses and cold storage warehouses<sup>1</sup>. Currently, with the new version of Riispoa in force, the establishments of meat and its byproducts can receive the classification of meatpacking slaughterhouse and meat and meat product processing unit<sup>3</sup>. It is worth mentioning that, at the time of the launch of the previous Riispoa, industrial refrigeration was still a poorly accessible technology, thus allowing establishments without refrigeration facilities. Since today the refrigeration technology is already widespread, it is necessary that slaughterhouses have cold storage facilities. The concept of “matadouros” is also no longer used and these places are now called “abatadouros” (slaughterhouses). The classification has also been amended since it is now possible for the same establishment to slaughter different species as long as it is done in appropriate facilities and with specific equipment for the corresponding purpose<sup>3</sup>. The new Riispoa also details the inspection before and after slaughter, in order to make it easier to understand.

Something new about the new Riispoa, related to slaughter technology, is the permission to use insufflation for skinning and boning of all kinds of butchery. In the past, this was only allowed for calves, sheep and goats. Now insufflation can be performed as an auxiliary method in the technological process of skinning and deboning of other meat-producing species<sup>3</sup>.

Regarding the slaughter of equidae, the novelty was the permission for the consumption of carcasses of animals with positive serology for Equine Infectious Anemia, provided that no systemic lesions occur in the *post mortem*<sup>3</sup> exam. There are not many studies on the sanitary inspection of equidae for this specific situation, but Santos and Fukuda<sup>19</sup> commented that this practice was accepted in some countries. It is also possible to observe a greater detail in the cases of glanders, on how to carry out the hygiene and disposal of contaminated carcasses.

In regard to swine cattle, it is still prohibited to slaughter non-castrated animals or animals that show signs of recent castration. However, the new Riispoa now allows the slaughter of castrated pigs by non-surgical methods<sup>3</sup>, such as the immunological castration that controls the substances involved in the non-castrated male odor. This method is important, since non-castrated pigs grow faster than castrated animals<sup>20</sup>. Another novelty of the Riispoa for pigs is the permission to use scorching, as long as scalding and depilation are done beforehand<sup>3</sup>. Another novelty was the use of conditional treatment by cold treatment of *Trichinella spirallis* (Trichinellosis) carcasses, complying with the time and temperature binomials (for 30 days, at -15° C; for 20 days, at -25° C; and for 12 days at -29° C)<sup>3</sup>. Cold treatment in carcasses affected by *T. spirallis* was already recommended by FAO<sup>21</sup> and described by Santos and Fukuda<sup>19</sup>.

Establishments for fish and fishery products previously received only two classifications, which may be fishery warehouses or fish canneries<sup>1</sup>. With the launch of the new regulation, the classification was expanded to include factory boat, fish slaughterhouse, fish processing and fish product processing unit and bivalve mollusk processing plant<sup>3</sup>.

In the case of fishery inspection, only amphibians and reptiles should be subject to *ante mortem* inspection. In the *post mortem* inspection, the pH of the fresh fish was modified: the ideal is less than 7.00 (fish), less than 7.85 (crustaceans) and less than 6.85 (mollusks)<sup>3</sup>. In the previous regulation, the pH of the outer meat was reported to be lower than 6.8 and the internal pH was to be lower than 6.5 in fish<sup>1</sup>. Despite this difference on pH verification in *post mortem* fishery products, there is no reference to the subject in the *Codex Alimentarius*. According to Soares and Gonçalves<sup>22</sup>, there are several methods for the quality inspection of fish, emphasizing the sensory methods, due to their efficiency, convenience and low cost.

A novelty also present in the new Riispoa was the greater range of fish species and their peculiarities. In the case of sensory characteristics, fish, crustaceans, mollusks (bivalves, cephalopods and gastropods), amphibians (frog meat) and reptiles (caiman and chelonian meat) are evaluated<sup>3</sup>.

Egg establishments are currently classified as poultry farms and egg and egg processing plants<sup>3</sup>. In the former Riispoa, egg and egg establishments were classified as egg warehouses and egg-canning factories<sup>1</sup>.

Chapter II addresses the industrial and sanitary inspection of eggs and their byproducts. It is more concise and objective than in the previous Riispoa. In addition to the changes in the classification of the establishments, there were also changes in the classification of the eggs. According to the new Riispoa, the eggs are now classified as category “A” or “B”<sup>3</sup>. Previously the eggs were classified in: extra, special, 1<sup>st</sup> quality, 2<sup>nd</sup> quality, 3<sup>rd</sup> quality and manufacture<sup>1</sup>. This demonstrates the MAPA’s interest in making the legislation clearer and simpler, in order to facilitate the identification of egg types by consumers.

Another change we observed is the greater assignment of responsibilities to egg establishments, since inspection in these establishments will be periodic and no longer permanent. Egg and egg byproduct establishments shall carry out procedures for the general assessment of the condition of shell cleanliness and integrity, examination by candling, classification of eggs and verification of the hygiene conditions and integrity of the package<sup>1</sup>.

In the current Riispoa, milk and dairy establishments have received a simpler classification compared to the previous one. They can be classified as dairy farm, refrigeration station, processing plant, dairy factory and cheese factory<sup>3</sup>. In the previous regulation, the classification of establishments could be that of rural properties (farms, stables and dairy farms), milk and dairy stations (reception, refrigeration, coagulation and cheese farms) and industrial establishments (processing plants, dairy factories, plant warehouses and dairy warehouses)<sup>1</sup>. It should be noted that there were other classifications that were revoked by Decree n. 1.812/1996<sup>11</sup>.



Other changes were the physico-chemical specifications of milk, which were modified in line with Normative Instruction n. 62, of March 29, 2011, which deals with technical regulations on milk production, identity and quality<sup>23</sup>. It is interesting to cite the only difference we observed: in relation to the cryoscopic index, Normative Instruction n. 62/2011 defines the range of  $-0.530^{\circ}$  H to  $-0.550^{\circ}$  H (equivalent to  $-0.512^{\circ}$  C and to  $-0.531^{\circ}$  C)<sup>1</sup>, whereas in the new Riispoa it is from  $-0.530^{\circ}$  H to  $-0.555^{\circ}$  H (equivalente to  $-0.512^{\circ}$  C and to  $-0.536^{\circ}$  C)<sup>3</sup>.

The changes in the new Riispoa in relation to milk and milk products were not significant, since most of them were already specified in 2011 by Normative Instruction n. 62/2011<sup>23</sup>.

As observed in the other products already mentioned, there were changes in the classification of bee products and byproducts. Previously, these establishments were called honey and beeswax and classified as apiaries or honey and beeswax warehouses<sup>1</sup>. The new Riispoa calls these establishments bee products and byproducts. They can be classified as units of extraction and processing of bee products or processing warehouse of bee products and byproducts<sup>3</sup>.

The great novelty for the inspection of honey and byproducts was the introduction of inspection of honey from stingless bees. The need for specific legislation for honey from stingless bees was suggested long ago by various authors<sup>24,25</sup>.

According to the new Riispoa, products of stingless bees must come from breeding sites in the form of meliponaria, authorized by the competent environmental body<sup>1</sup>. However, the new Riispoa does not cite the physico-chemical and sensory characteristics of stingless bees' products, since they have peculiarities in comparison with *Apis mellifera*, particularly in relation to moisture content. With that, it is expected to introduce additional standards specifying technical regulations for stingless bee products.

Another relevant fact was the pressure from bee producers on the sanitary requirements that impaired the domestic bee production of small producers. In this sense, the new Riispoa is more flexible in the requirements for the operation of small agribusinesses such as beekeeping farms, an issue that was already more flexible since the publication of Normative Instruction n. 5, of February 14, 2017<sup>26</sup>.

One of the main changes proposed by Decree n. 9.013/2017<sup>3</sup> was the implementation of self-control programs. The new Riispoa has added modern concepts of Good Manufacturing Practices (GMP), Standard Operating Procedures (SOP) and Hazard Analysis and Critical Control Points (HACCP), which directly influence product safety.

According to Profeta and Silva<sup>27</sup>, the adoption of HACCP began to be regulated in Brazil in 1993: the MAPA initially regulated fish, while the Ministry of Health established the Good Manufacturing Practices (GMP) and HACCP as the basis for health surveillance. Over time, HACCP has been gaining strength internationally and thus the new Riispoa could not fail to add these concepts to its regulations. It is worth mentioning that there were already regulations of both the Brazilian Agency of Sanitary Surveillance

(Anvisa) and the MAPA that regulated the programs of self-control. One of them is Ordinance n. 46, of February 10, 1998, which establishes the System of Analysis of Hazards and Critical Control Points to be deployed gradually in the facilities of products of animal origin under the regime of Federal Inspection (SIF)<sup>28</sup>.

In the *ante mortem* and *post mortem* inspection of several animal species, there is a verification of the programs of self-control of establishments and the practice of hygiene and hygienic habits by food handlers, in addition to checking the hygienic-sanitary conditions of the facilities, equipment and operation of the establishments.

Self-control programs should include animal welfare. Thus, facilities and equipment for the reception and accommodation of animals should be designed to meet animal welfare standards and be obliged to adopt measures to prevent maltreatment and to implement actions aimed at animal welfare and protection, from shipment at the origin to the time of slaughter<sup>3</sup>.

The new labeling proposed by the new Riispoa simplifies, rationalizes and modernizes the process of evaluation of the labeling of products of animal origin, making it possible to computerize product labeling information, thus expediting the necessary responses from MAPA<sup>4</sup>.

There have been several updates on the labeling of different animal products. Among these are the changes in the labeling of dairy products, which, in the case of milk meal, must show the percentage of milk contained on the main panel of the label and, in the case of cheese, if it was prepared from membrane filtration, therefore being referred to as "cheeses"<sup>3</sup>.

Still according to the MAPA, the amendments take into account the Consumer Defense Code and other rules on product labeling, the implementation of food traceability throughout the production chain, and establishment of food recall<sup>1</sup>. It should also be noted that §2 of article 427 rules that the registration of the label must be renewed every ten years. This is different from the previous Riispoa, which did not define the validity of the label registration<sup>3</sup>. The SIF stamp models can be observed in Dipoa Memorandum n. 13/2017<sup>29</sup>.

The stamps have undergone different changes in their shape and size. The former Riispoa had 18 stamp models (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 13-A, 14, 14-A, 14- 15)<sup>1</sup>. However, the new Riispoa is more simplified, with only seven stamps. The stamp must contain the words "Ministry of Agriculture", on the upper outer edge; the word "Brazil" in the upper internal part; the word "Inspected" in the center; the establishment registration number, below the word "Inspected", and the initials "SIF", at the inner lower edge<sup>3</sup>.

As a result of the controversy surrounding animal products in the "Weak Flesh Operation", the government implemented stricter measures and penalties for infringing establishments. According to the MAPA<sup>4</sup>, the modernization of Riispoa, which refers to the responsibilities of the infraction, preventive measures, penalties and administrative procedures, redefines the sanctions and classifies the infractions as mild, moderate, serious and very serious, with proportional application of penalties. Moreover, it introduces



the concept of aggravating and mitigating conditions. According to Manning and Soon<sup>30</sup>, intentional food crime is of a plural nature in terms of types of crime and the different levels of financial gain, and successful modes of food crime depend on how successful the crime was and at what point, if so, it was detected and reported.

We would like to emphasize that the infractions include modern concepts like the noncompliance with the deadlines required by the self-control programs, demonstrating the concern with food safety. It is also worth mentioning that the establishments will take all necessary steps to collect batches of products that pose a risk to public health or that have been altered or counterfeit.

Penalties shall be pecuniary in nature or shall consist of an obligation to do or not to do something, and sanctions may be a warning, fine, seizure or condemnation of raw materials and products of animal origin, suspension of activity, and revocation of registration or relationship of the establishment<sup>3</sup>.

Despite the short publication time of Decree n. 9.013/2017, it underwent its first amendments through Decree n. 9.069, of May 31, 2017<sup>31</sup>, less than 3 months after the launch of the new Riispoa. Decree n. 9.069/2017 amended 21 articles of the new Riispoa, with overall changes of a conceptual type.

## CONCLUSIONS

The assessment of the new Riispoa, approved by Decree n. 9.013/2017<sup>3</sup>, was timely because it demonstrated the updates in comparison with the previous legislation. During this study we observed that the meaning of this Riispoa review was to update a regulation of 65 years to modern concepts of food safety and adaptation to the current reality experienced by the Brazilian agricultural sector.

The new model of permanent inspection in the establishments with the highest health risk and periodic inspection in

the lower-risk establishments is still in the new Riispoa. This assigns greater responsibility to the establishments. This model of inspection allows for a smaller need for SIF human resources, since the shortage of employees in this area is at alarming levels. Although this model is a trend adopted in other countries, it is still a matter of discussion in Brazil, mainly regarding the efficiency and credibility of the inspected products.

The increase in penalties demonstrates the government's interest in preventing and combating fraud episodes, such as those revealed by the "Weak Flesh Operation". In addition, there was interest in the legalization of small producers, who will now have requirements according to the size of their production. Another important fact was the use of risk analysis in the production chain and the specification of the risk level of the establishments.

There was also the inclusion of concepts of self-control programs that play a key role in food safety and also of modern laboratory tests as ancillary to routine inspection. These methodologies described in the new Riispoa were already regulated in complementary norms and are of paramount importance for the improvement of the quality of our products of animal origin.

The deliberate breaches of the new Riispoa enable regulation by complementary norms, in addition to allowing unforeseen technological processes, as long as they are approved by Dipoa. This allows a constant modernization of SIF, since changes made through complementary norms are less bureaucratic than changes that require a presidential decree.

As we analyze the updates of the new Riispoa, we can get a better understanding of the legislation and its influences in the preservation of the safety, identity, quality and integrity of the products and the health and interests of the consumer. However, further studies are necessary to clarify the impact of this new regulation on the different spheres of national agribusiness and especially on the health of the consumers.

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#### Conflict of Interest

Authors have no potential conflict of interest to declare, related to this study's political or financial peers and institutions.



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