



Good Manufacturing Practices in Brazilian Industries

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Abstract: Food safety includes knowledge and practices related to collective health, in order to prevent risks associated with food. Adjacent is quality control, which combines basic foundations for the food production process to be carried out avoiding the emergence of foodborne diseases (DTAs). DTAs are caused by eating contaminated food or water, where several factors contribute to the emergence of diseases. With this, the Health Surveillance presents as one of the inspection roles for the release of the health license. Thus, the present work is a review of the literature based on quality control programs based on food safety with an emphasis on foodborne diseases. To guarantee product hygiene and food safety, there are several programs, such as: Good Manufacturing Practices (GMP) aim to avoid contamination of products, from the reception of raw materials to consumption. SelfControl Program (PAC), the main tool for agribusiness in the control of manufacturing processes.

Key Word: Health surveillance ; Good Manufacturing Practices ; Foodborne diseases

I. INTRODUCTION

Food safety encompasses knowledge and practices related to collective health, in order to prevent risks associated with food (Pandolfi, Moreira, & Teixeira, 2020). Adjacent to this is quality management/control, which associates fundamentals so that the food production process is carried out avoiding the emergence of foodborne diseases (FTDs) by food-borne illnesses (PEREIRA, 2020).

The increase in DTAs is significantly around the world, and several factors contribute to the emergence of these diseases (de Andrade & Sturion, 2015). DTAs are caused by ingestion of contaminated food or water (Brazil, 2017). However, studies report that most cases are not reported to health authorities, as many of the pathogens present in food cause mild symptoms (OLIVEIRA et al., 2010).

Having as principles the adoption of checklist, the organization of control sheets and the training of handlers, mainly. Because such procedures make it clear what the flaws in the process are and allow for the production of quality food (Pereira, 2020). In this context, there is the implementation of the Good Manufacturing Practices (GMP) program in food industries. With this, the sanitary surveillance presents as one of the roles the inspection for the release of sanitary license, in addition to attendance to complaints, programmed actions, food collection, investigation of food outbreaks, analysis of architectural projects, analysis of labeling of food produced in the municipality and educational activities (BRAZIL, 2017).

For Buzinaro and Gasparotto (2019) GMP's primary objective is to avoid contamination of products, ranging from the reception of raw materials to the final product. In Brazilian legislation, GMP's are mandatory for all food producing establishments and industries. Food safety is a current issue that must always be discussed and addressed, as it refers to the health of the population, not just the quality of the products.

As seen through the possible foodborne diseases (DTAs), which are caused by the ingestion of contaminated food or water and can occur due to failures in the management and quality control process. Therefore, the present work is a literature review based on quality control programs in terms of food safety.

II. MATERIALS AND METHODS

Databases such as MEDLINE/Pubmed, Scielo, and Google Scholar were consulted.

III. DISCUSSION

In addition, it is demonstrated that these, go along with the sanitary surveillance, collaborating with the inspection for release, attendance, programmed actions, food collection, investigation of food outbreaks, analysis of architectural projects, analysis of labeling of food and educational activities. With this, we demonstrate the interaction between health surveillance and food safety in an explicit and undeniable way.

DTAs are increasing worldwide. Several factors contribute to the emergence of these diseases, including: population

increase, increase in vulnerable groups, disorderly urbanization process and large-scale food production (de Andrade & Sturion, 2015). DTAs are diseases affected by the ingestion of contaminated food and/or water. There are more than 250 types of DTAs, most being infections by bacteria and their toxins, viruses and parasites (Brasil, 2017b). Biological agents are also well known for their damage to food safety, however, attention should also be paid to the physical and chemical risks during the process of manufacturing, handling, storing and supplying food (SEBRAE, 2018).

The Health Surveillance (2017) mentions some of the factors that influence food contamination by pathogens: infected victims, inadequate handling practices, inadequate hygiene, toxic containers, accidental or intentional additives. There are factors that also influence the proliferation of pathogens arising from handling and storage. Finally, there are factors that influence the survival of pathogens: insufficient heating or cooking and insufficient reheating.

Due to the consumption of food outside the home, the population is concerned about the quality of the food consumed (Pandolfi, Moreira & Teixeira, 2020), which is no longer a competitive advantage and has become a permanent condition (Veronezi & Caveião, 2016), however, a large part of this public does not have the necessary information to evaluate and demand improvements related to food quality (PANDOLFI, MOREIRA & TEIXEIRA, 2020).

Quality definitions have changed significantly over time; being a simple set of operational actions, centered and located in small improvements of the productive process, to a fundamental element of the management of the organizations. And currently being a critical factor for the "survival" of companies, products, processes and especially people (David & Guivant, 2020). target of constant concern by public health inspection bodies (SANTOS et al., 2014).

According to Marchiori (2015), companies are seeking to implement quality management aiming at continuous improvement, a requirement of the consumer market. This management system, quality control and employee training are currently a differential in the food industry.

Still thinking about ensuring food safety and preventing DTAs, we must consider that food handlers play an important role in food services and make them understand that such importance is vital for the fluidity of production with safety (Pereira & Zanardo, 2020). And thinking in this way, even the management of people in food companies is important, since the qualification of employees in the area of food safety is essential to maintain the quality of the general process (BARBOSA et al., 2018).

DTAs are all diseases caused by the ingestion of biological, chemical or physical hazards present in food (Santa Catarina Sanitary Surveillance, 2017). to food products, but there is a low probability of infecting foodborne pathogens, however, regulatory and public health agencies can develop food safety education material that contains more relevant personal information and emphasizes the relatively high probability of occurrence of pathogens. foodborne genes. (YU, NEAL, & SIRSAT, 2018).

The concern with the safety of food served in establishments intended for the sale of meals comprises the ready food, and all stages of the process, including the receipt of raw material, where the packaged products must be carefully observed in relation to the condition of the packaging, which can give an idea of the food inside (Barbosa et al., 2018).

It is always recommended that establishments adopt the use of sanitizing products on vegetables, with the aim of sanitizing all foods served without heat treatment (Ferreira et al., 2013). The quality of facilities and buildings in food service establishments is highly related to the precaution of food contamination, and the facilities must be structured in order to avoid crossings between clean and contaminated areas and must be maintained in adequate hygienic conditions (NUNES, 2017).

According to the Health Code Commission of the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO), food hygiene encompasses preventive measures necessary for preparing, handling, storage, transport and sale of food, in order to ensure harmless, healthy and suitable products for human consumption (MARINS, 2014).

In this context, there is a way to obtain and guarantee quality and safety in industries: the implementation of the Good Manufacturing Practices (GMP) program, which aims to avoid contamination of products, from the reception of raw materials to consumption of the product. Product Self-Control Program (PAC) main tool of the agroindustry in the control of the manufacturing processes. Standard operating procedure (SOP) consists of describing all operations to perform a given procedure.

Hazard Analysis and Critical Control Points (HACCP) system is based on the application of technical and scientific principles of prevention, in order to ensure the safety of food production, handling, transport, distribution and consumption processes. Moreover, the 5S method, which consists of organizing the workplace through maintenance, cleaning, standardization and discipline in carrying out the work, with as little supervision as possible.

IV. CONCLUSION

Food safety is a current topic that must always be discussed and addressed, since it refers to the health of the population, not just the quality of the products. As seen through the possible foodborne diseases (DTAs), which are caused by the ingestion of contaminated food or water and can occur due to failures in the management and quality control process. In addition, it is demonstrated that these, go along with the sanitary surveillance, collaborating with the inspection for release, attendance, programmed actions, food collection, investigation of food outbreaks, analysis of architectural projects, analysis of labeling of food produced and educational activities. With this, we demonstrate the interaction between health surveillance and food safety in an explicit and undeniable way.

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