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Food technology bases in collective health

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Abstract: *Innovation is essential for the development of any company. In the food sector, is different, and more and more consumers want to consume new products that can combine flavor, nutrition, quality and safety. The study has as its theme the analysis of technology transfer processes between Industrialized Countries and New Industrialized Countries in Food Production collective, from the implementation of technological innovations. The selected theoretical framework comprises the understanding of aspects related to technology transfer, ergonomics, anthropotechnology and interactions of technology and the environment. The health regulation sector is responsible for determining the quality and safety standards for new products, therefore, the entire innovation process for the food industry must follow the registration flows established by this sector to be made available to consumers. According to a substantialist approach, it starts with the quality and complexity of tasks to arrive at the necessary attributes on collective health.*
Key Word: *New Technologies; New food products; Collective health.*

I. INTRODUCTION

Food production is one of the pillars of any economy, whether for its scope and essentiality, whether through the network of directly and indirectly related sectors, such as agriculture, services and that of inputs, additives, fertilizers, pesticides, capital goods and packaging. Like the main innovations linked to the food market are in the areas of inputs, biotechnology, capital goods and packaging (GOUVEIA, 2006).

Brazil is a major producer of commodities and has shown itself to be competitive internationally in the production of various agricultural raw materials, however, this performance is not achieved. when it comes to processed foods (SIDONIO et al., 2013), although the full potential of raw materials, inputs, human and technological capital developed over the last few years.

Technological advances related to the food segment are evident, especially in countries with a tradition in this regard, such as Japan, the United States, Canada, among others. THE technological prospecting in this segment allows a better view of the profile of this market in the world: China, South Korea, the United States and Japan are appointed as the leaders in the deposit of technologies for the food segment. Brazil does not appear in the ranking of countries with technology deposits for this sector, and this is explained by the low level of investments Brazilians in research and development linked to this sector (MARQUES et al., 2014).

What makes Brazil stand behind the great patent applicants is the very characteristic of the technological development of the sector. Innovations related to selected technologies in the Brazil, as well as other food segments, are incremental innovations, which do not present significant value to the market (MARQUES et al., 2014). In addition to this fact, the innovations in the food industry follow the sector's own protocols, necessary to guarantee the safety and safety of new products for consumers. These control steps are carried out by government units, the health regulation sector.

And also with this purpose, that the search for technological innovation occurs, with the technology transfer, always constituting a primordial factor for the economic development and the improvement of social conditions and, currently, machines, products and procedures form a set that is incessantly transferred from industrialized countries to developing countries, or new industrialized countries, that is, those countries of the Third World, among which is Brazil, which are in an advanced state of development and which is characterized by exporting industrialized products (VIDOSSICH et ali, 1995, p. 214).

However, despite this vital role played by technology, the processes of technology transfers are not simple, nor do they present results ever so evident. Tushman et ali (1990, p. 2) emphasize that technology and technological innovation are clearly interpreted as a source of uncertainty for companies, not just due to the challenges they bring when changing their internal characteristics, but also due to impacts on conditions of competition, investment and profitability.

II. MATERIAL AND METHODS

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

III.DISCUSSION

According to Jugend and Silva (2013) technology can be defined as a set of knowledge applied to the development of products, processes, services or management methodologies of a company. In the case of the food industry, Nantes (2008) states that product design is based on two main characteristics: market strength and consumer needs. The latter varies according to local habits, culture and customs.

Technological innovation in the Brazilian food industry occurs primarily through the diffusion of technology and not by processes and internal demands of industries (NANTES, 2008). The importance innovation to expand and open new markets, as well as to increase capacity productive, seems to be a trend of companies that innovate and differentiate products and with less representativeness of firms specialized in standardized products (CONCEIÇÃO; ALMEIDA, 2005). In Brazil, it is observed that the food industries that seek to innovate are in generally the leaders in their segment, the other companies modernize their product offering through imitation process (NANTES, 2008).

Winger and Wall (2009) highlight that consumers demand change all the time. These changes range from basic considerations such as improving the sanitary quality of food and increasing the shelf life of products to sophisticated product changes involving nutritional characteristics, palatability and convenience. Current product development should promote interaction between consumers and technical production capacity in addition to emerging research in food science.

From the point of view of public health, it is healthy for the entire population to have inspection and standardization, as some of these technologies are developed on a laboratory scale and/or pilot, where it is not yet possible to assess all of its applications, as well as its risks, it must always be considered that the public health factor cannot be disregarded in this case. In addition, the protection of legislation encompasses the use of technologies that can mask product features, facilitating fraud.

Lasserre apud Villar (1993, p. 50-2) describes a study, in which, based on the analysis of various international technology transfer processes in the north-south direction, found that, in the vast majority of cases, both sellers and buyers failed to develop strategies classified by him as development, or that is, those that would benefit both. In these cases, the partners in technology transfer remained in a position: defensive or opportunistic, revealing the lack of confidence in the process. The author also highlights, in the absence of development strategies, a high level of dissatisfaction with the functioning of the transferred systems.

Regarding safety aspects, new food products must present: tests nutritional and/or physiological and/or toxicological in experimental animals; essay biochemicals; epidemiological studies; clinical trials; proof of traditional use, observed in the population, without damage to health; comprehensive evidence from scientific literature, organisms international health and internationally recognized legislation on the characteristics of food or ingredient (BRASIL, 1999).

The Collective Food sector is represented by all establishments involved with the production and distribution of meals for any type of community, for example, companies, schools, hospitals, nursing homes, prisons, communities religious or armed forces, positioning themselves as service providers.

For Dumoulin et al (1993, p. 19-20) "a service is an act (or a succession of acts), of defined duration and location, performed by human means or materials, made for the benefit of an individual or collective customer, from processes, coded procedures and behaviors". Thus, for Quinn (1992) the sector of services includes all economic activities, the result of which may not be a product physical, is usually consumed at the time of production and has an added value in forms that are essentially intangible for the consumer.

Also in the Collective Food sector, like any other sector productive, these technological innovations, after being tested and implemented in countries developed, begin to be transferred to the new industrialized countries, in this case, Brazil.

In Brazil, the issue of introducing technological innovations for the production of collective feeding is in the initial phase. Production through the cold chain process, but the use of pre-prepared products from agri-food industries, in the so-called assembly kitchen, begins to be gradually made possible.

The service sector is increasingly playing a relevant role in the economy Brazilian and global, showing a growth trend that is widespread in the modern and developed economies. Despite this fact, there is little discussion about
this productive segment with regard to studies for the understanding of innovation technological. Gonçalves (1994, p. 68) highlights that, considering the growing importance of this segment, understand what goes on inside it, especially in what refers to innovations in their work procedures, it is necessary to generate conditions for the formation of a managerial mentality better prepared for the sector.

Gadelha et al. (2003) in an assessment of public health and innovation policies claim that the State has different and often contradictory roles, depending on the structure and dynamics the markets of goods and services, the orientation of national policy. As principal instance of power in which the different agents seek to exert their influence, it is up to the State act in the mediation between the supply and demand of goods and services, having as a dilemma and challenge the a combination of issues relating to health promotion and industrial development and technological in the área.

IV.CONCLUSION

The regulatory sector is important in ensuring the quality and safety of new products and technologies for the food sector in Brazil and worldwide. For establishing and is part of the innovation process.

The technology validation registration flow strengthens integration as which requires as part of the process technical reports, evidence of laboratory experiments and validation of technologies by expert researchers in the sector if the new technology does not have protection is not supported by current legislation or that may result in a risk of safety, product identity and quality; prejudice to official sanitary inspection procedures; harm to animal welfare.

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