Abstract

One of the biggest challenges of the food industry is the preservation of its products, that is, to prevent them from being attacked by microorganisms that decompose them hauling economic losses and severe health damage to the consumer. Today, competition in the food industry is very high and any company that does not offer the quality products is doomed to fail. Consumers demand more and the industry still stands offering what is asked: quality, security and safety. The package, in addition to fulfilling its core functions is becoming a means of sophisticated interactions with content and a record of relevant information for both the end consumer and intermediate players in the value chain and concepts are born of active and intelligent packaging. A smart container is defined as a system that monitors the condition of the packaged product, being able to register and provide information about product quality or condition of the container, showing the possible "abnormal" practices that have suffered the product or the container during the entire supply chain, such as transportation or storage. These systems monitor the mechanisms of altered food due to physiological, chemical and biological processes that respond and communicate changes in the status of the product as time - temperature, Oxygen, Carbon dioxide, microbial growth, etc. There are different types of smart packaging such as time -temperature indicators, color indicators, indicators of pathogens and indicators of leaks, to name a few. Through literature review, arguments that demonstrate the usefulness and necessity of the use of smart packaging to preserve the quality and safety of the product it contains, from manufacturing to the time it is used by consumers were found, as these besides communicating or providing information about their state, acting as a marketing tool.

Keywords

safety, security, consumer, providing information, communication, product quality