

**“The use of quantitative real-time polymerase chain reaction (qRT-PCR) technologies to screen for the presence of total bacteria in a liquid sample”****Andy Moreno**

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The purpose of this paper is to report the results of a novel test and release research study substantiating the use of quantitative, real-time polymerase chain reaction (qRT-PCR) technologies for the detection of human pathogens in fresh produce. Traditional culture-based testing for the presence of these pathogens requires from 2 to 14 days. The uniqueness of this presentation is the application of qRT-PCR technologies to the surveillance screening fresh produce for pathogens, such as *E. coli*, *Salmonella*, and *Listeria*. With the application of qRT-PCR technologies, decision-makers can know of the presence of these pathogens within one (1) hour. The research was to gather quantitative and qualitative data in a mixed method research project to support the introduction of qRT-PCR technologies. The objective of the study was to substantiate the theory that the envisioned application of qRT-PCR technologies in a one (1) hour test and release practicable, industrial scheme is supportable and viable. The strengths and weaknesses of the study's methods and designs were deliberated. The justifications to support the research why the engaged methods and designs were the most appropriate for this research were discussed. Alternative methods/designs were also reviewed and explained why they were less desirable for the purposes of this study. The ultimate objective of the study was to corroborate all assertions with scholarly research and to provide policy makers with valid data which supports whether qRT-PCR technologies can be applied to practical test and release programs for fresh produce.

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**Regulatory status of herbal medicines-Considerations about Cuba and Latin America****Diadelis Ramirez Figueredo**

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In the last decade there has been a global upsurge in the use of traditional medicine and complementary and alternative medicine in both developed and developing countries. This is one of the main reasons for reinforcing the surveillance of the safety, efficacy and quality control of traditional medicine, complementary and alternative medicines. This work describes important aspects about the art state of the regulatory status of herbal medicines. Besides that, data related with the countries involved in the World Health Organization (WHO) program for traditional medicine will be showed. Another important aspect is, the importance of clinical trials in order to guarantee the safety, quality and efficacy of Natural Health Product, the main mistakes in clinical trials of natural products are explained. The market and the main challenges are analyzed in the investigation of the phyto-medicines as well as the tendencies in the growth of this attractive sector. The WHO strategy for the development of herbal medicinal product is also showed. The regulatory framework of traditional medicine in Cuba and in Latin America will be presented as well as the implementation of WHO strategy. In conclusion, Drug Regulatory Authorities should ensure the quality, safety and efficacy of traditional medicines.

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