

Title:

An overview concerning methodologies applied to guarantee fruits and vegetables safety

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Abstract: (Your abstract must use **Normal style** and must fit in this box. Your abstract should be no longer than 300 words. The box will 'expand' over 2 pages as you add text/diagrams into it.)

The demand for fresh vegetable and fruit salads has increased in recent years. These foods are minimal processed and can be a vehicle of several pathogens. The microorganisms most frequently linked to produce-related outbreaks include bacteria (*Salmonella* spp., *Listeria monocytogenes*, *Escherichia coli*; *Shigella* spp.), viruses (Norwalk-like, hepatitis A), and parasites (*Cryptosporidium* spp., *Cyclospora* spp.). Contamination of fresh fruits and vegetables is of special concern, because such produce is likely to be consumed raw, without any type of microbiologically lethal processing, thus may cause potential safety problems.

There are many different technologies to reduce/eliminate the microorganisms contaminants of foods, such as blanching and pasteurization. However, some should not be applied to fruits and vegetables, without compromising the fresh characteristics of these products. In attempt to improve the microbial status of these valuable foods, a number of chemical (washings with chlorine, chlorine dioxide, organic acids, ozone, electrolysed water) and physical methods (irradiation, ultraviolet light) are also alternatively used. The objective of this work is to gather information concerning the effectiveness and advantages/limitations of all these methodologies.