

Title Combined Use of Modified Atmosphere Packaging and Natural Compounds for Food Preservation

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Abstract

Spoilage of food products is due to activity of microorganisms or biochemical and physical changes. Various food preservation methods have been developed over the years. Traditionally, chemicals are used to control the activity of microorganisms. An increased awareness by the environmental and health agencies and consumers of the harmful chemical residues in food and environment led to a restricted use of chemical preservatives. This trend, known as green consumerism, has resulted, since the beginning of the 1990s, in the increase in consumer demand for natural antimicrobial compounds, i.e. molecules of natural origin, not toxic for humans, environmentally safe, not expensive and easily found on sale. Modified atmosphere packaging (MAP) is one of the most successful preservation techniques suitable for agricultural and food products. With the vast basic and fundamental knowledge available on this subject, the research in this area is taking a new dimension to suit the new consumer trends and demands. The combination of natural antimicrobials to MAP conditions in a sealed packaging system very often represents a strategic solution to prolong food shelf life. The aim of this work is to give an overview on the use of natural compounds combined with modified atmosphere packaging. The effects of this safe and environmentally friendly technology on the improvement of several foods quality and safety will be presented.

<http://www.springerlink.com/content/q6618108770q778p/fulltext.pdf>