**New and sustainable trends in food packaging: edible packaging**

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The agri-food sector has focused on the development of improved preservation techniques that effectively slow down food spoilage and maintain food quality throughout the shelf-life.

Packaging is one of the main processes for preserving and maintaining the quality of food products for distribution, storage, and final consumption. Apart from its usual function of containing the food, it is also responsible for ensuring freshness, flavour, and nutritional value. The use of packaging based on polymers derived from fossil fuels, such as polyvinyl chloride (PVC), polyethylene terephthalate (PET), polypropylene (PP), polyethylene (PE), polystyrene (PS), polyamide (PA), among others), has increased in recent years, generating serious environmental problems. These materials are environmentally unfriendly, and come from non-renewable and non-biodegradable sources, ending up in landfills or in the oceans.

Therefore, and considering the changes in the consumer’s lifestyle and the legislation in force, there has been an increase in the demand for safe and high-quality products, fresh, minimally processed, and ready-to-eat, with an extended shelf-life, which creates the need for modernised packaging technologies. The use of edible packaging developed from different biopolymers has proven to be a good alternative. It is possible to add other natural compounds, such as antioxidants, probiotics, and antifungals, among others, to the formulations of these packages. These can be obtained by exploiting the valorisation potential of some forestry and agri-food sector by-products, contributing to the bioeconomy, that promotes the replacement of fossil resources and the implementation of new waste management strategies. The use of these edible packaging will add value to food products, extend their shelf-life, and maintain their safety and quality.

The growing awareness and concern of both consumers and food industry with health and environment, and the increasing plastic waste associated with foods, has led to the need to consider the use of eco-friendly, natural, and sustainable technologies. As defined by the European Commission, it is expected that by 2030 all plastic packaging considered for food products should be recycled, because plastics and plastic packaging are an integral and important part of the global economy. Thus, the need arises for the use of alternatives to the use of ultralight plastic bags and plastic cuvettes for fresh food products. This topic is of extreme importance considering the recently published legislation and the urgent need to come up with improved food preservation technologies, decrease food loss and of waste, and reduce the use of petroleum-based plastics.

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