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Formação: Licenciatura em Engenharia Biológica na Universidade do Minho em 2005.

Doutoramento na Universidade do Minho – Tecnologia Alimentar – “Development and characterization of edible coatings to the preservation of cheese quality” finalizado em 2010.

Posição a actual: início em Abril de 2011 de uma bolsa de pós-doc com o tema de “Development and Characterization of Nano-structured Systems for Food Applications”.

Trabalho desenvolvido: utilização de biomateriais para desenvolvimento de revestimentos comestíveis e nanoestruturas para aplicações alimentares, nas quais foram publicadas aproximadamente 29 artigos em revistas com revisão e 4 capítulos de livros.



Edible packaging for application on cheese

Embalagens comestíveis para aplicação em queijo

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Innovations constantly appear in food packaging, always aiming at creating a more efficient quality preservation system while improving foods' attractiveness and marketability. The utilization of renewable sources for packaging materials, such as hydrocolloids from biological origin, is one of the main trends of the food packaging industry. Edible films/coatings have been considered as one of the potential technologies that can be used to increase the storability of foods and to improve the existent packaging technology, helping to ensure microbial safety and preservation of food from the influence of external factors.

In view of these advantages concerning the application of edible coating solutions, recent developments have been achieved regarding the utilization of new materials. Work has been developed on the utilization of galactomannans, chitosan, agar, whey protein and collagen in the production of edible films/coatings and the incorporation of materials such as plasticizers, lipids, clays and bioactive compounds. The ability of those materials to act as main material for edible coatings and films was studied and different formulations were tested as coatings for cheese based on their wettability and physical properties. Finally, edible coatings were applied to cheese and their influence on gas transfer rates, chemical and microbiological properties of cheese was evaluated.

Based on the obtained results is viewed that in a near future tailored edible packaging solutions based on natural biopolymers can be applied to cheese, partially replacing non-biodegradable/non-edible plastics.

Keywords: edible packaging; polysaccharides, proteins, edible film, edible coating, cheese.