



## WP 8 'Training, Dissemination and Technology Transfer'

### INFO-SHEET on TRUEFOOD main research results Active packaging for cheese

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#### **Needs / challenges:**

Active packaging refers to the incorporation of additives into packaging systems with the aim of maintaining or extending packed product quality and shelf-life. Active packaging systems discussed include oxygen scavengers, carbon dioxide scavengers and emitters, moisture control agents and antimicrobial packaging technologies.

#### **Possible solutions / Improvements through research activities (WP and task):**

The problem of packaging of traditional cheeses was afforded by innovative films releasing active antimicrobial compounds. Several films were prepared based on low density polyethylene and regenerate cellulose with suitable coatings able to release several antimicrobial compounds (nisin, natamycin, chitosan). The characteristics of the films were analyzed from physical and chemical point of view and their ability in preserving two traditional Czech cheeses and one Portuguese cheese were established. In two cases the films prepared have been found suitable for improving storage conditions and safety of cheese. In a one case the active compound was not effective in the control of pathogen microbiological activity and also had interference with natural cheese bacterial flora.

#### **Expected benefits/Impact of the results and possible application by SMEs:**

The main benefit for SME is the possibility of shelf life extension without the need of direct supplementation of preservatives to the product. This method is easily and safely protecting the product in the distribution chain and is protecting the traditional manner of product. Of course it can be available also for other types of products.