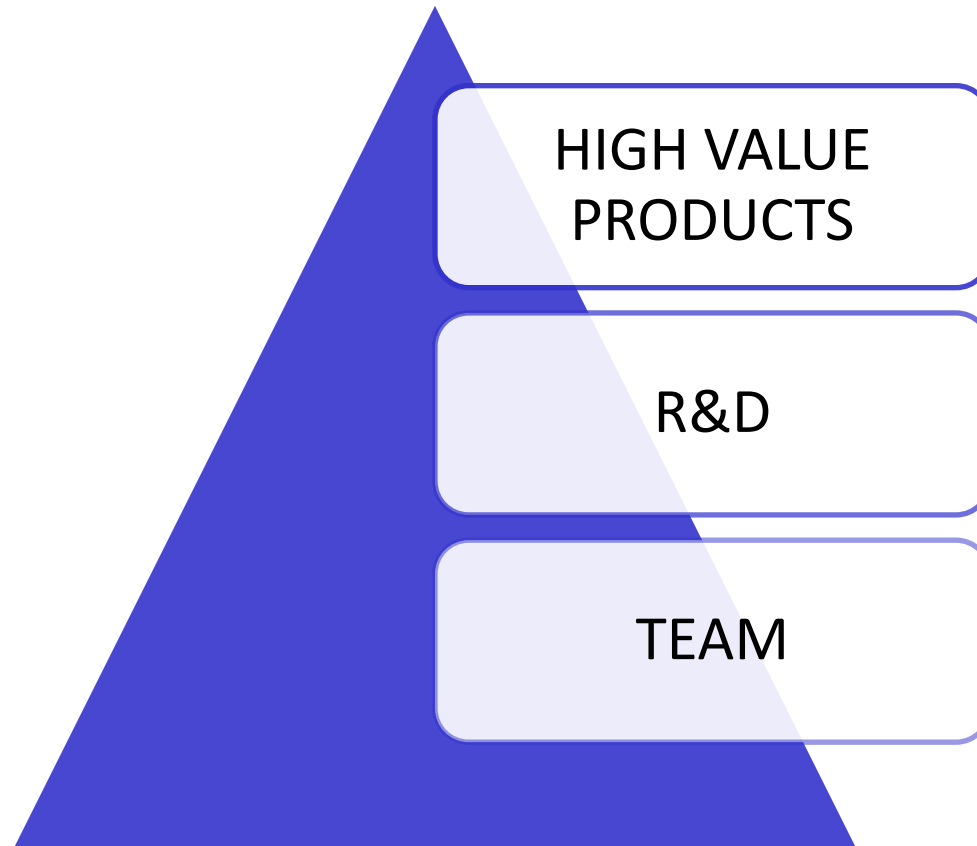


corporate presentation_ 2014





- **Complementary multidisciplinary team with expertise in:**

Food Technology: Evolution of the product inside the packaging from a chemical and microbiological point of view

Conversion technology
Flexo&Rotogravure

Packaging Technology

Coating manufacturing
technology & functional
control procedures

Networking: clients -
suppliers - research centers
at European level



*“To FUNCTIONALIZE
a package is to
provide it with high
value properties the
original lacks.”*



A change in paradigm !!!

artibal[®]



Passive packaging

The diagram consists of two large, blue, stylized arrows pointing towards each other. The left arrow is labeled 'Passive packaging' and the right arrow is labeled 'Functional packaging'. The arrows are positioned horizontally and meet at their tips in the center of the slide.

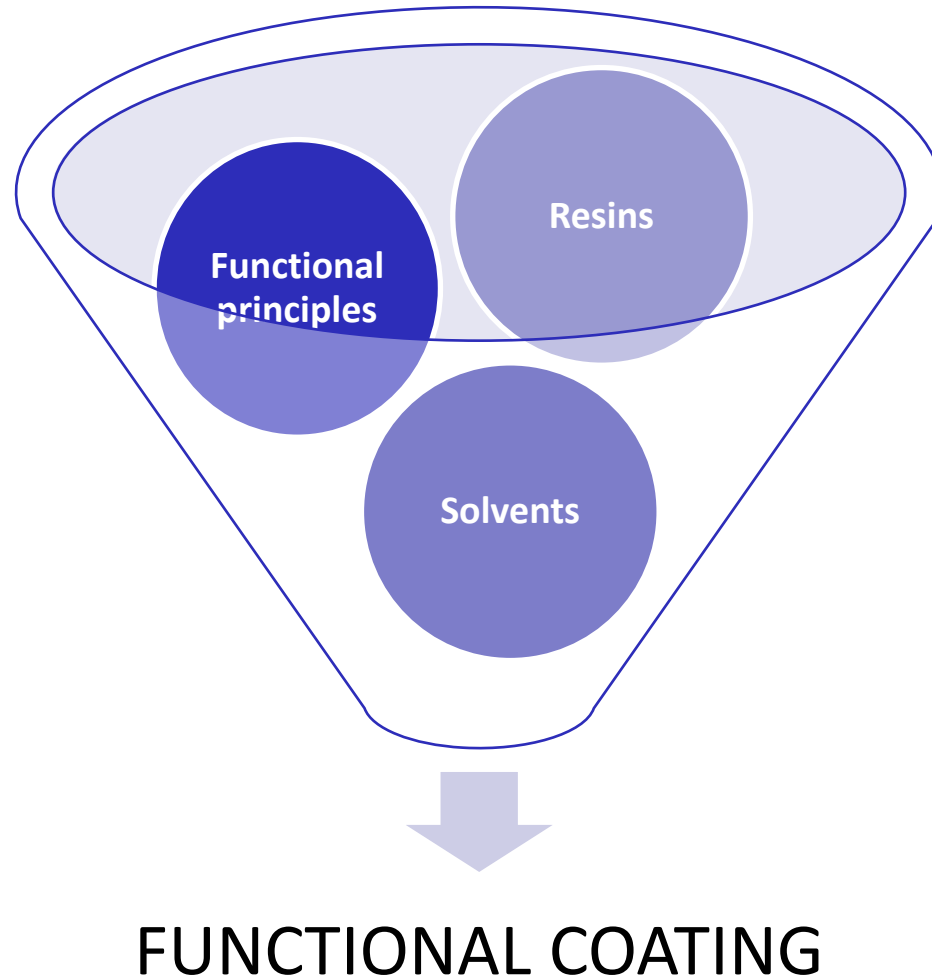
Functional packaging

Packaging material mass functionalization

Incorporation of foreign elements into the packaging

Our proposal: Functional coatings

- On the packaging surface
- On labels
- On interleaves
-





Active packaging

High value packaging

Direct contact

- Require intimate contact between the packaging and the product (vacuum packs,...)

Vapor phase

- Acting on the head space and released gradually depending on the requirements of the packaged product

Antioxidants

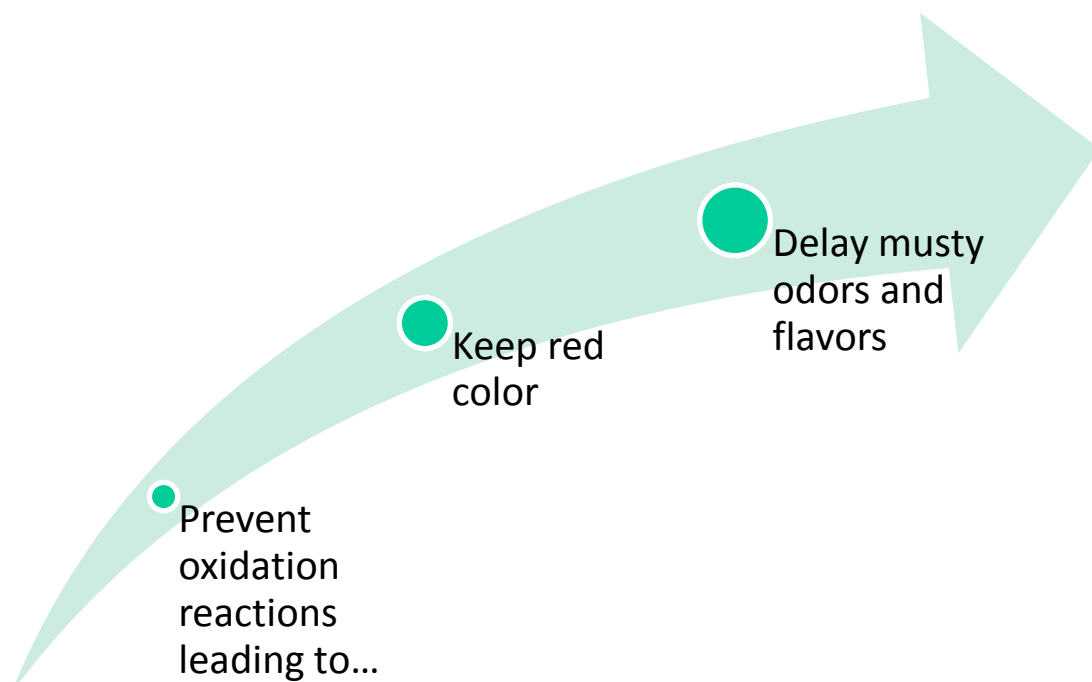


- Retard loss of quality due to oxidative processes

Antimicrobial



- Bacteriostatic or bactericidal



**INCREASE
SHELF LIFE**



Control



Active packaging



Antioxidant coating

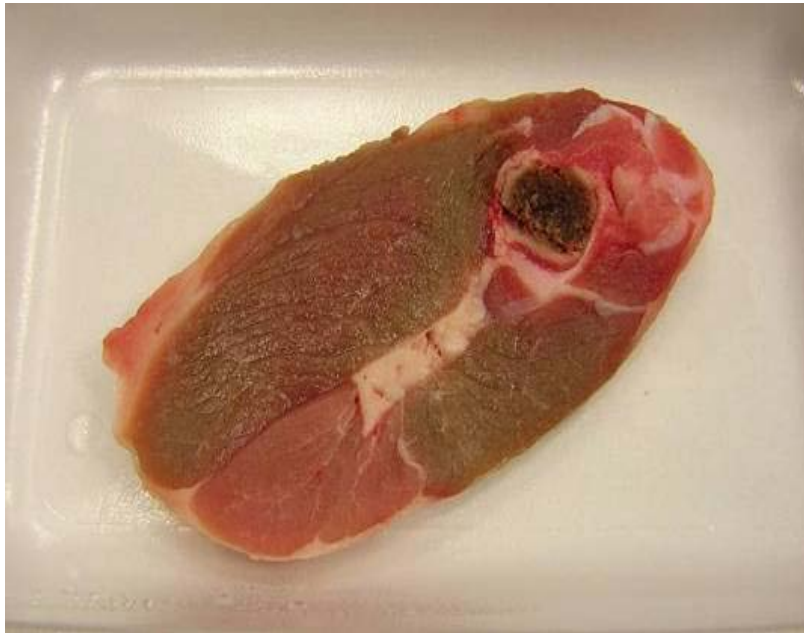
High barrier film



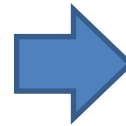
Antioxidant packaging



Control



Active packaging



Antioxidant coating

High barrier film



Antioxidant packaging



Extend the life of
fresh foods.

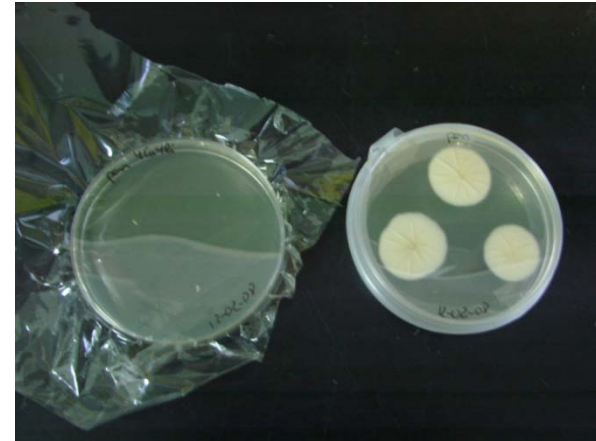
Maintain
organoleptic
properties.

Retard the growth
of bacteria, molds
and yeasts.

Safer and
healthier
foodstuffs



P. roqueforti



P. nalgiovense



E. repens

Control

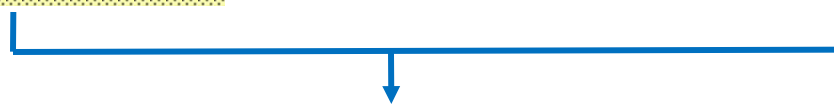


Active packaging



Antimicrobial coating

Film: BOPP, PET,..



Antimicrobial packaging



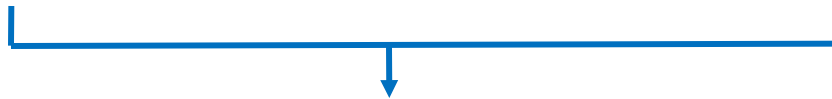
Control

Active ATM 104 coating



Antimicrobial coating

PET

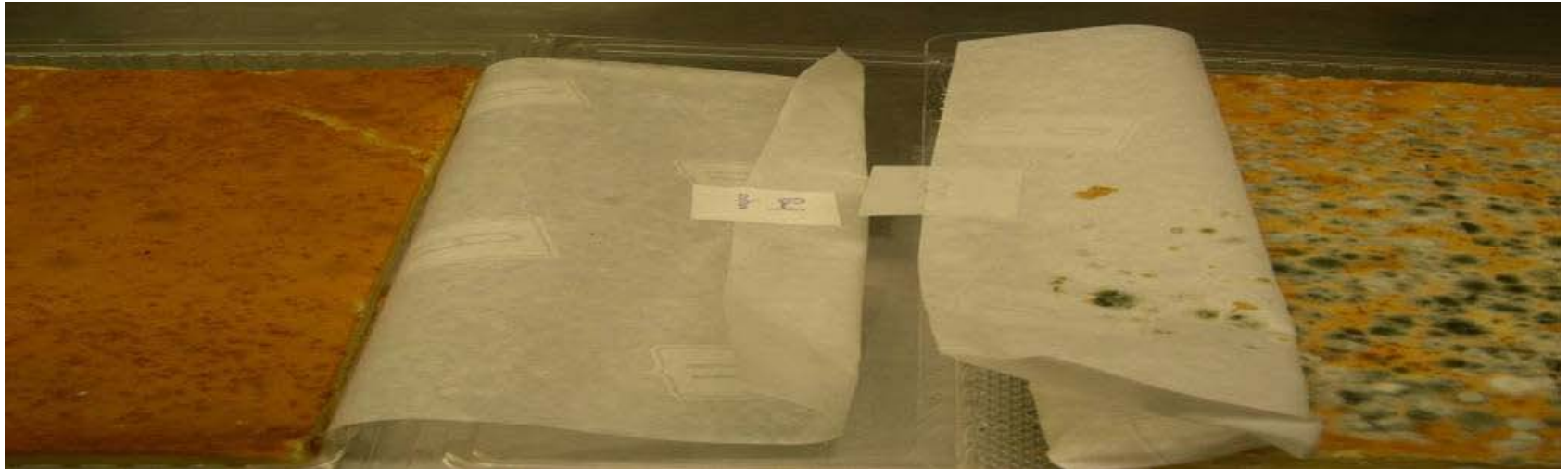


Antimicrobial packaging



Active packaging

Control



Antimicrobial coating

Paper



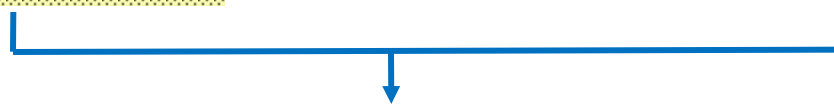
Antimicrobial packaging





Antimicrobial coating

PET



Antimicrobial packaging



Environment friendly

“Sensorial” packs

- Flavors liberation
- Controlled roughness

UV filter

High barrier



Characterization of the
desired functionality

Identification of functional
principles

Encapsulation of the
functional principles

Manufacturing of functional
coating





- PACKAGING - 3000 Ton/ year
- INDUSTRIAL - 6000 Ton/ year



•GENERAL LABORATORY

Gas Chromatograph/ FID Mod. Autosystem _ PERKIN ELMER
Infrared spectrometer Mod. Paragon 1000 _ PERKIN ELMER
DSC Mod. Diamond _ PERKIN ELMER
Dinamometer Mod. 1011 _ INSTRON
Brillometer Tri-gloss_ BYK GADNER
Spectrocolorimeter_ X-RITE



•MICROBIOLOGY

Biological Safety Cabinet, Class II Type A2 _SCO

Microbiology Incubator model KB53 _ BINDER

Homogenizer Stomacher- 400 _ COMECTA

EUltrafreezer -86 °C model MDF-U32V _ SANYO

•TEST CHAMBERS

Saline fog chamber _ 1000 L_ PLASTOQUÍMICA

Acidic saline fog chamber _ 500 L _ PLASTOQ.

Accelerate weathering chamber QUV-b _ Q-PANEL

Kesternich cycles chamber _ DYCOMETAL



•PATENTS

- SPANISH ACTIVE ANTIOXIDANT COATING
- EPO ACTIVE ANTIOXIDANT COATING
- EPO ACTIVE ANTIMICROBIAL COATING



•SCIENTIFIC PROJECTS

- 20 PROJECTS (2003-2013), 10 OF THEM AS COORDINATORS

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