Packaging protects food against damage. Smart packaging can further improve the functions of packaging.

Active packaging can interact closely with the internal environment of the packaging and the packed products in order to ensure the quality, protect the valuable nutritional components and prevent degradation.

Intelligent packaging on the other hand senses changes inside the packaging atmosphere and communicates about the quality of the product.
SMART PACKAGING CONNECTS TO GENERAL TRENDS

SMART PACKAGING CONNECTS TO MATERIAL TRENDS

ActInPak

100% recycled materials

Deze Biotex verpakking bestaat voor 80% uit gerecycleerd karton. Cet emballage Biotex consiste pour 100% de carton recyclé.

compostable
OPPORTUNITIES – SOME EXAMPLES
CONSUMER ENGAGEMENT – AUGMENTED REALITY


SANNE TIEKSTRA | AUSTRIAN PACKAGING DAY | 20/11/2018 | SHEET 6
INFORMATION FOOD QUALITY – INDICATORS

Do not consume if the indicator is darker than the reference colour.

FRESH

PAST BEST

Sanne Tiekstra | Austrian Packaging Day | 20/11/2018 | Sheet 8

http://freshcodelabel.com
INFORMATION FOOD QUALITY – NFC

Stora Enso Macaron box

Sanne Tiestra | Austrian Packaging Day | 20/11/2018 | Sheet 9
Interactive moisture sensor. The display is activated by putting the metal feet's in a plant pot.
QUALITY ASSURANCE – ANTIMICROBIAL

Left to right: CO2 emitter by Cellcomb | Demonstrator antimicrobial flower packaging KCPK | Fresh paper by Fenugreen | Sanne Tiekstra | Austrian Packaging Day | 20/11/2018 | Sheet 11
SAFETY ASSURANCE – ANTIMICROBIAL

1. Tear out a filter
2. Slide into the custom filter box
3. Pour water through

Left to right: Drinkable book by Teri Dankovic | Demonstrator antimicrobial Medicine box

NewGenPak
SANNE TIEKSTRA | AUSTRIAN PACKAGING DAY | 20/11/2018 | SHEET 12
CONSUMER ENGAGEMENT – INTERACTIVITY

http://blog.drupa.com/fish-packaging/
CONVENIENCE – SELF HEATING / SELF EXPANDING


SMART PACKAGING – OPPORTUNITIES

• Protect valuable nutritional components
• Prevent degradation
• Ensure quality
• Guarantee, predict and extend shelf life, also after opening
• Save high value material: the product
• Limit over-packaging
• More natural food by reduction of preservatives
• Communicate to the consumer about the quality or the state of the product (e.g. safe, original...)
• Reduce value losses: Security / anti-counterfeiting
CHALLENGES
Identification of challenges and hurdles to overcome for successful market implementation on several topics

Large European network of scientists and industry from 40 different countries

www.actinpak.eu
SMART PACKAGING – SUMMARISING

• Gap research <> industry
  • Lack of awareness of what is AIP
  • Lack of awareness of benefits, added value and impact; not only for consumer, also throughout value chain
  • Cooperation between stakeholders
    • Industry seems to prefer fleshed out technologies, whereas science delivers partial solutions
  • Challenges differ per packaging type (eg bulk vs unit)
  • Who is key decision maker; Stakeholder that benefits most?
  • Prove advantages outweigh the costs
  • Conflicting interests throughout value chain >> find common ground
• Gap industry <> consumers
  • Active packaging is “invisible”
  • Lack of awareness of what is AIP, reach out on different levels
  • More action needed on traceability of unsafe food + informing public when unsafe products are found on the market
  • We are all consumers: if you will never buy it, forget it
1. Society
   » Video explaining AIP
   » Videos about research
2. Industrial
   » Virtual Showroom with possibilities
   » Leaflets
3. Scientific
   » Conferences
   » Papers
   • www.actinpak.eu
SAVE THE DATE
ON NOVEMBER 21ST
THE ACTINPAK CONFERENCE AND FAIR
WILL TAKE PLACE IN VIENNA, AUSTRIA

as well-known scientific and industry members of the European COST Action FP1405 ActInPak will share interactive presentations and physical demonstrations of active and intelligent packaging.

Here, you will find the latest on novel innovations and market implementation of packaging that interacts with its contents (active) or communicates with its consumers (intelligent).

Results of the 4-year COST Action, which involves partners from 43 countries representing 209 academic institutions, 83 industries and 35 technical centres, will be presented.

The conference and fair program will soon be published on the ActInPak website where you can also read more about ActInPak.

For more information, please visit the ActInPak LinkedIn page or YouTube channel. Follow us also on Facebook and Twitter.
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