Future Food Packaging – Trends and Sustainability

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Packaging has been used and developed since thousands of years...
... always to support our everyday life
Today, 3 of 4 Europeans view packaging as waste
8 million ton plastics/year reaches our oceans
1/3 of the food we buy we throw away!
Packaging is fundamental in helping the prevention and reduction of food waste.
The package protects products from damage, spoilage and contamination.

OUTSIDE

- Light
- Oxygene
- Water vapour

PACKAGING MATERIAL

INSIDE (product)

- Water vapour
- Aroma
- Gas

Barrier layer
A package should save more than it costs

Challenge: meeting demands while at the same time use less resources

Source: Innventia
Taking care of packaging

- Remove
- Reduce
- Reuse
- Recycle
- Recover (material or energy)

EU Packaging Regulation targets minimized waste
A Sustainable Packaging Context

- Protection
- Attraction
- Environment
- Functionality
- Economy
- Communication
The Plastic Challenge
More and more plastic on retail shelves
Without plastic...

Weight would increase 300 %, energy consumption 60 % and greenhouse gases 60 %

Source: “The impact of plastics on life cycle energy consumption and greenhouse gas emissions in Europe” (Denkstatt, Austria)
Is bioplastic sustainable?

Still only a minor share of plastic

Most common raw material sources: sugar canes and corn
Plastic strategy

- Design packaging mtrl for recycling
- Develop recycling processes
- Quality of recycled plastics has to increase
- Increase share of biobased sources

Plastic packaging should be made from either renewable sources or recycled material
Convenience Food Packaging
A huge assortment of tray solutions for ready meals - many different materials, shapes and formats on the market.
PaperLite®

Formable paper, hermetically tight and heat sealable

Source: Flextrus/BillerudKorsnäs
Micvac has solutions for both Retail and Food Service.
A system supply approach

1. Filling the tray
2. Film and valve application
3. Cooking and pasteurisation
4. Cooling
Packaging, with tailored atmosphere keeps quality for longer
The Future Is Here
Intelligent and active packaging

Printed electronics & sensor technology will open new opportunities for packaging in many areas.
Temperature sensors
Packaging of the future is interactive

• The industry has a golden opportunity to integrate technology in the packaging to create value for customers
• QR is just the beginning. We will see more possibilities for intuitive interaction with packaging in the future.
Imagination is more important than knowledge! - A. Einstein