

# THE SMART SOLUTION

## AGAINST

### FOOD WASTE



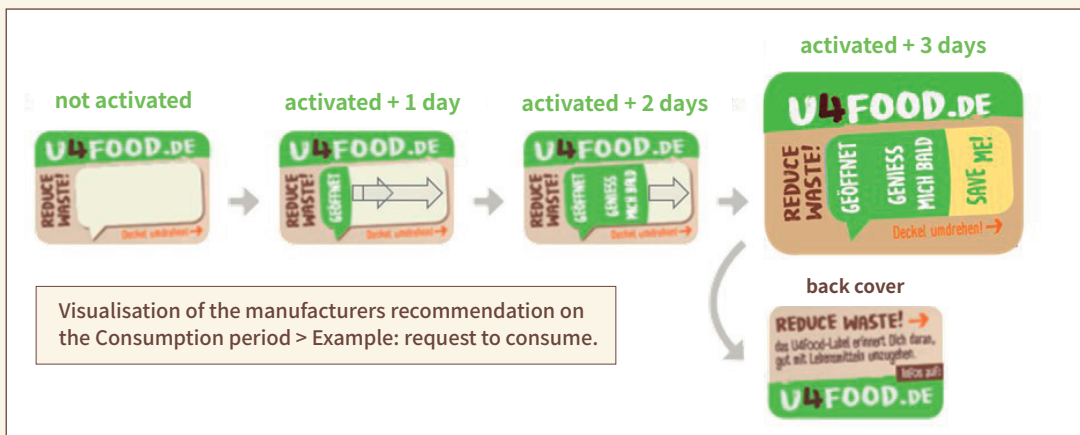
FOODSAVING & PACKAGING WASTE AVOIDANCE FOR CHILLED PRODUCTS IN THE FOOD SECTOR.

APPLICATION EXAMPLE

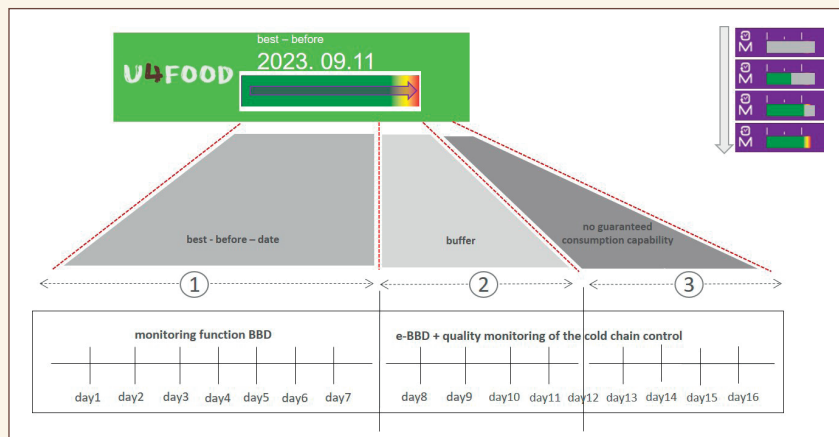
## WHAT VOTES FOR THE APPLICATION OF OUR PAPER-THIN U4FOOD SMART LABEL FOR CHILLED PRODUCTS!

Your refrigerated products automatically adjust the opening time. This avoids uncertainties in quality understanding and waste.

### OPENING TIME CONTROL (AVAILABLE FOR IMMEDIATE ORDER)



### DYNAMIC BEST BEFORE DATE (RESERVE NOW)



extended BBD period



# CONSUMPTION SAFETY WITH THE HELP OF A DYNAMIC OPENING WINDOW



APPLICATION EXAMPLES - APPLICATION FOR ALMOST ALL CHILLED PRODUCTS (BEVERAGES, DELICATESSEN, CHEESE, ETC.)

## WHAT IS TRIGGERED DURING USE:

- Extension of the opening time / BBD through optimal cooling by several days possible
- Shelf life displayed independently by sensor, from extension to shortening
- Dynamic and direct communication from the product to the consumer
- Interpretation-free info with challenge character
- Visual signals with sequential multiple information, scaling or codes
- Learning effect on sustainability and-Foodsaving

Consumption recommendation & best-before date: Dynamic extension or shortening, depending on the refrigeration situation!



Activation on dispensing, by seal label, peel-off tab, manually or by product humidity.

## WHAT HAPPENS ON THE TRANSPORT, IN THE RETAIL AND WHAT HAPPENS AT HOME:

- Closing the supply chain in cold chain monitoring and in product safety
- Supports resource conservation in the industry, the sustainability efforts of government, industry, trade & consumers
- Provides assurance on product quality
- Educates consumers in the understanding of consumption
- Educates consumers in personal consumer behaviour towards freshness and consumption
- Placement on and in the packaging, direct food contact possible
- Activation automatic or manual, depending on requirements or use
- Image enhancement & product differentiation
- Correction of shelf life and consumption perceptions
  - (a) Consumption recommendation
  - (b) Best before date
  - (c) Expiry date

Problem avoidance instead of problem solving!

### Functional & informational links with:

#### Coupling:

1. QR Code und Augmented Reality.
  2. NFC and RFID for information transfer into the digital world.
- confirmation of DIN SPEC project „Opening Time Monitoring“ for market standard definition.
- transition successful, target prices reached, ready for mass market & several million / day producible.
- reduce food waste and packaging waste.
- 2nd HY 2023, (1.) opening time support (2.) dynamic BBD.



German Institute for Standardisation:  
Roll production:

Contribution to sustainability:  
Market entry:

Other sectors: pharmaceuticals & chemicals, logistics, security printing, promotion...

