

Keep-it[®] time- and temperature indicator

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Keep-it; a time- and temperature indicator



The Indicator



KEEP-IT® – TIME- AND TEMPERATURE INDICATOR
- ELIMINATES UNCERTAINTY



The Indicator

EXPIRY DATE WAS
“BEST BEFORE”



Keep-it is a **real time shelf life indicator** showing the temperature dependent degradation of fresh food products – based on a function of time and temperature

THIS IS KEEP-IT®:



The Indicator

Keep-it® history and timeline:

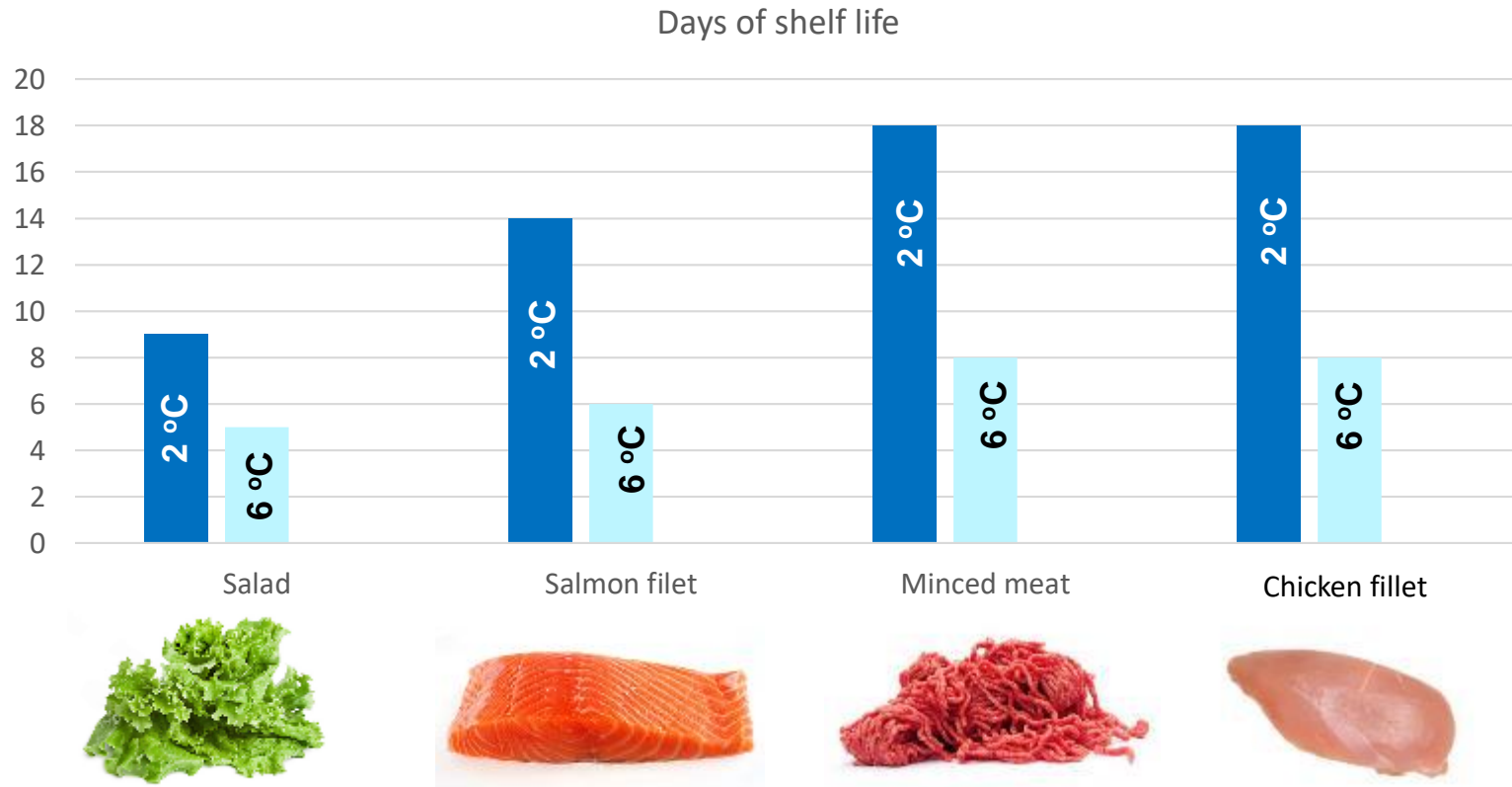
2001 – 2006	2007 – 2011	2012	2018
<p>IDEA CONCEIVED BY 4 PROMINENT PROFESSORS AT THE UNIVERISTY OF LIFE SCIENCES IN NORWAY.</p>	<p>DEVELOPMENT OF TECHNOLOGY, MACHINES AND CONCEPT.</p>	<p>FIRST TESTS CARRIED OUT IN 200 STORES AND 700.000 CONSUMER PACKS.</p>	<p>LISTING OF 36 SKU'S IN ALL MAJOR FRESH PRODUCT CATEGORIES IN NORWEGIAN GROCERY RETAIL. 50 MILL INDICATORS SOLD. USED AS A PART OF THE CONTROL SYSTEM BY OSLO UNIVERSITY HOSPITAL, LARGEST HOSPITAL I NORWAY.</p>



SMALL VARIATIONS IN TEMPERATURE HAS A GREAT IMPACT ON PRODUCT QUALITY AND SHELF LIFE



The Indicator



THIS IS KEEP-IT®:

How Keep-it® works:

- The Keep-it indicator is a label that constantly monitors temperature over time, and therefore shows the actual temperature dependent shelf life of a product.
- The mechanism of the indicator is based on a temperature dependent food grade chemical reaction.
- The speed of the chemical reaction mimics the shelf life profile (degradation speed) of the products.



When the indicator reaches "0 days left", the product should no longer be consumed.

Indicator shows days left.

THIS IS KEEP-IT®:

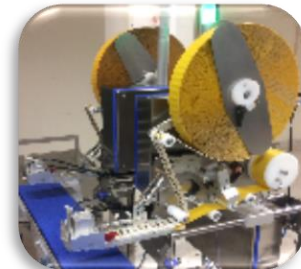
How Keep-it® is produced:

Tailor made

- Each Keep-it is tailor made and developed for each specific product or product groups based on shelf life studies, e.g. microbial tests.
- Keep-it shows the **actual shelf life of the product in real time** – based on the temperature exposure of the products.

Attached at production line

- The indicator is attached to the food package at the production line (labelling area) in the facility of the food manufacturer.
- Keep-it applicators designed, built and sold by Keep-it.



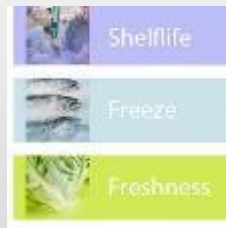
THE KEEP-IT® INDICATOR IS CUSTOM MADE ACCORDING TO REQUIREMENT



The Indicator

Indicator categories:

- Chilled products
- Freeze products
- Freeze - thaw products

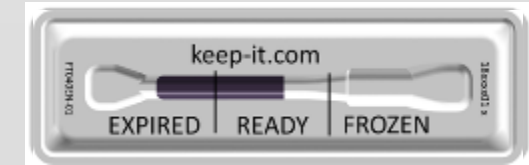
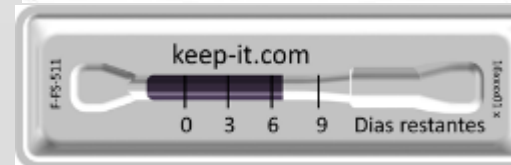


Indicator specs:

- Shelf life : From 2 to 30 days
- Packages: MAP, skinpack, flowpack & vacuum pack
- Stored & transported chilled
- Shelf life storage : 3 months

Tailormade graphical design:

- Countdown of days
- Fresh - Expired
- Use - Do not use
- OK - Not OK
- Best before (indicated with simple line)
- Frozen - Ready - Expired



THIS IS KEEP-IT®:

How to use Keep-it® :



The date stamp shows
2 days left

The indicator shows 0
remaining shelf life days

Secure food quality & safety



The date stamp shows
1 day left

The indicator shows 3
remaining shelf life days

Reduce food waste

THIS IS KEEP-IT®:

Keep-it® and business status Norway:

50 mill indicators sold in Norwegian retail, on 36 food products



Findings from TNS driver & tracker analysis

- 90% does not feel the traditional datestamp is exact enough
- 30% awareness of Keep-it (before any marketing has been done)
- 81% mean that the Keep-it indicator has high relevance. Very high acceptance!
- 43% are willing to pay 50 øre (ca 6 cents) more for a product with an indicator
- 42% are willing to switch brands if it has an indicator on
- 25% are willing to switch store to get products with indicators
- 77% remember they bought the indicator at Rema

KEEP-IT®: participant in Innovation projects

SeaPack

Facts and Figures

IPN project Funded by NRC, Havbruk2 (Blonar)

Project period: 2016-2019
Total budget: 1.3 mill Euros

Project owner: SalMar

Project Partners

Lycro, NLP, Marel, Tommen Gram, Multivac Praxair, KeepIt Tech.

R&D:

Østfoldforskning
Nofima

Project Manager:

Marit Kvalvåg Pettersen



SeaPack Improved packaging technology for increased shelf life for seafood and reduced food waste

Transport packaging

Consumer packaging

Partners: SALMAR, LYCRO, Marel, Tommen Gram, Multivac Praxair, KeepIt Tech, Østfoldforskning, Nofima

Packaging of seafood with A&I



Storage temp	Shelf life
6°C	Expired (16-10)
4°C	3 days (2-4)
1°C	8-9 days (12-4)

14 days of storage

SeaPack

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THANK YOU FOR YOUR ATTEN

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Read more at www.keep-it.com



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