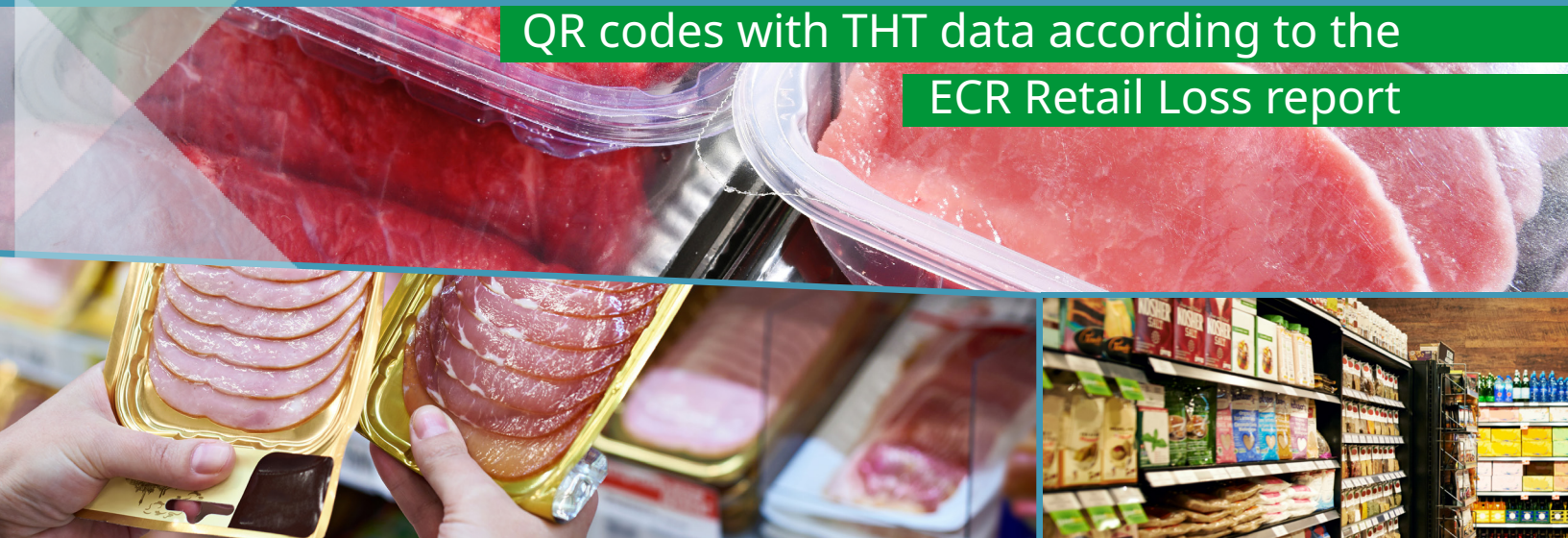




MINI-GUIDE

QR codes in the meat industry: everything you need to know about successful implementation according to GS1 guidelines

with 10 critical conditions for successful scaling up of QR codes with THT data according to the ECR Retail Loss report



Are you prepared?

Review Domino's checklist for technical implementation



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Why this guide?

The world of packaging within the meat industry is changing rapidly. Retailers are increasingly adopting smart technologies to make their assortment more efficient and transparent. An important development is the use of QR codes, which not only replace barcodes but also contain additional data, such as the best-before date (BBD).

This guide provides insight into the key drivers from retail, shows what this means for you as a meat producer, processor, or supplier, and offers a practical overview of the steps you can take now to join this movement.



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The push from retail

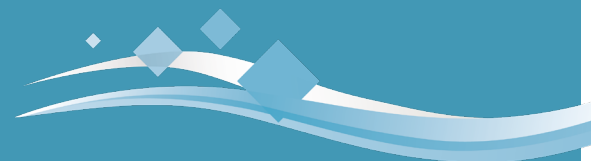
Recent research by ECR Retail Loss, conducted among major European retailers, shows that the adoption of QR codes containing the expiry date is increasing. Retailers expect this to give them better control over their stock, reduce waste and increase transparency towards consumers.

What does this mean for meat producers and suppliers?

For you as a meat producer or supplier in the meat industry, this means your processes must be ready to generate and handle dynamic codes. A static barcode is no longer sufficient; pre-packaged meat must contain dynamic, structured data. Specifically, this requires adjustments in various parts of your organization:

- **Packaging process:** The code must be printed in the right place, at the right time, and in the correct resolution during production.
- **IT infrastructure:** Product data such as best-before date (BBD), GTIN, and batch numbers must be structured, up-to-date, and available for integration into the code.
- **Supply chain & operations:** Processes around inventory management, returns, or recalls can benefit from the extra data provided they are properly set up.

This calls for a multidisciplinary approach involving packaging, operations, and IT. Essentially, it means looking beyond the standard label and investing in new technologies. By doing so, you ensure that your pre-packaged meat remains future-proof.



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Domino's Checklist for Your Technical Implementation

What is the status of your technical implementation?

Check

1. Technical suitability of coding equipment

- Does the coding equipment support QR codes?
- Is GS1 Digital Link syntax supported?
- Can the printer print variable data in URL format?
- Have the printer settings been optimised to print QR codes?

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2. Data integration and software connectivity

- Are Digital Link URLs automatically generated?
- Is integration with ERP/MES/WMS in place?
- Is data automatically sent to the printer?

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3. Alignment with packaging and production line

- Is the packaging artwork and material suitable for a QR code?
- Is the overprint box size and position on pack suitable to print the QR code?
- Is product handling optimised to print QR codes?

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4. Verification and quality control

- Is there a vision inspection system for control?
- Is the code checked for quality (ISO 15415)?
- Are errors automatically logged?
- Is there a manual fallback solution?

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5. Scanners & downstream compatibility

- Are scanners suitable for reading QR or URLs?
- Is the Digital Link correctly read by partners?
- Do mobile devices read the QR code correctly?

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6. Training & management

- Is staff trained to print and check QR codes?
- Are standard operating procedures documented?
- Are IT, marketing, and packaging teams involved?
- Has a pilot been conducted on a meat production line?

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How do QR codes work when data is stored in them?

A QR code with embedded data contains more than just a link to a website or a product number. Using standardized GS1 structures, additional information can be included, such as:

- Best-before date (BBD)
- Batch or lot number

This information is encoded in a QR Code powered by GS1 and can be printed inline on pre-packaged meat products. When a consumer or retailer scans the code, they gain direct access to contextual, up-to-date product data—essential for fresh meat products.

Technically, this data is encoded according to standardized GS1 norms, ensuring reliability and universal readability. Domino provides solutions that enable codes to be printed directly onto meat packaging and other products, even when dealing with diverse materials and production processes in the meat industry.

Read our blog: *"What data to include in a QR code powered by GS1"* for more information.



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QR CODES:

Benefits for the Entire Meat Supply Chain



FOR RETAILERS

Automatic checkout control guarantees fresh meat products
Automatic price reduction as the best-before date approaches
More efficient inventory management reduces food waste

FOR CONSUMERS



Greater assurance of freshness and meat quality
Increased transparency builds trust in the brand and retailer
One scan provides all product information



FOR SUPPLIERS

Positions you as an innovative and future-oriented supply chain partner
Better monitoring of meat stock, fewer returns and less waste
Improved collaboration with retailers through QR code implementation



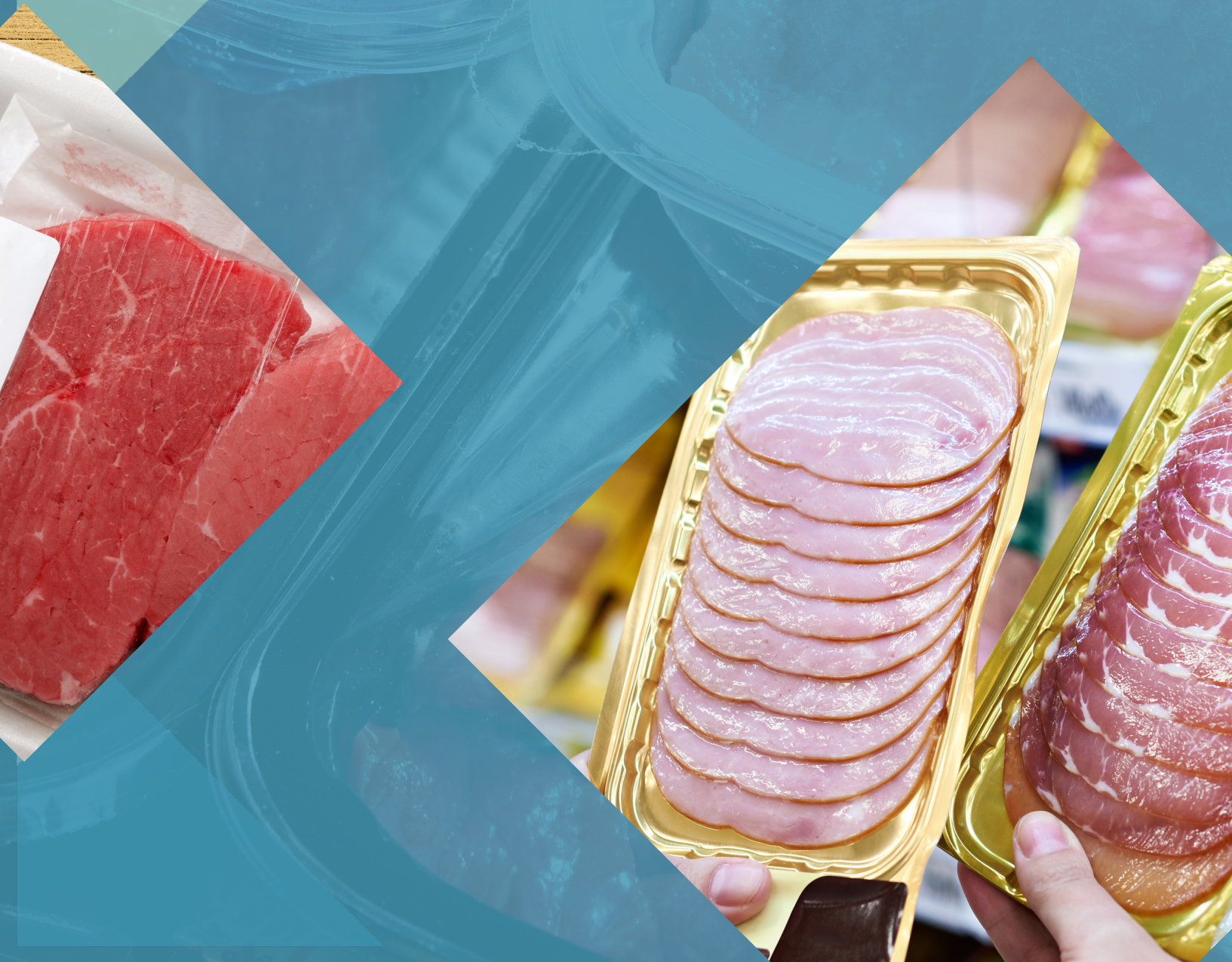
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Retail: 10 Critical Conditions for Successfully Scaling QR Codes with Best-Before Data on Meat Products

Based on the independent ECR report (2025)

More and more major retailers are exploring the use of QR codes with bestbefore dates to improve control over fresh meat products and work more transparently with consumers and supply chain partners. The ECR report identifies 10 critical conditions that must be in place to successfully scale within the meat supply chain.

On the following page, we summarize these conditions for you:



1. QR codes support future regulatory compliance

QR codes with shelf-life information can help meet (future) food safety and waste reduction regulations.

2. Make food waste reduction a strategic priority

Involve top management to ensure sufficient budget and attention.

3. Standardization as the key to growth

GS1-based QR standards are essential for interoperability and sustainable growth.

4. One point of contact, one clear direction

Assign a clear internal owner who coordinates the project across all departments.

5. Develop a solid business case

Define success criteria, measure ROI, and weigh costs and benefits.

6. Ensure technological readiness

Systems like POS, ERP, and logistics must be able to read and process QR code data.

7. Engage internal teams

Train employees and integrate QR code data into daily workflows.

8. Prepare suppliers and partners

Ensure supply chain partners and retailers are involved in standards and planning.

9. Build consumer trust

Emphasize the value of these codes for shelf-life and product information.

10. Ensure no one is left behind

Consider small suppliers and consumers without smartphones.

Want to know more?

Find out how our technologies support efficient production lines and reliable product identification.

Feel free to contact us for advice, an exploratory discussion, or a concrete next step.



Visit our Food Sector page to explore innovative coding and marking solutions for food packaging, ensuring traceability, compliance, and production efficiency.



Blog: Practical manufacturing and packaging considerations when printing GS1 2D codes

Click here to view the full ECR Retail Loss report:
Successful scaling of QR codes with best-before data

