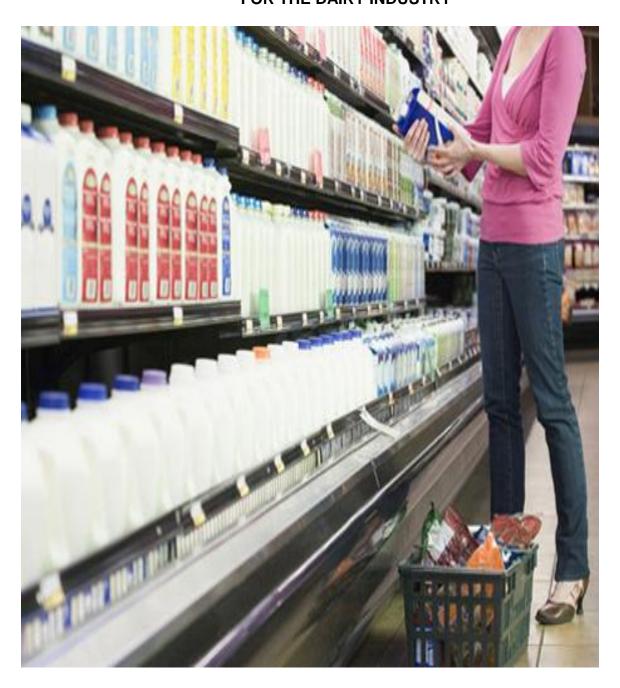


September 2012

GUIDANCE ON THE APPLICATION OF DATE MARKS AND STORAGE INSTRUCTIONS FOR THE DAIRY INDUSTRY



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Scope

The aim of this guidance is to support decision making by those responsible for the labelling of dairy products, to provide consumers with information that can help reduce food wastage in the home without compromising on food safety and quality.

Disclaimer

This is guidance and the actual choice of date marking and storage information will depend on the manufacturing and product characteristics and may therefore differ from what is in this guidance.

Acknowledgements

This guidance has been produced by Dairy UK's Scientific and Technical Committee, with contributions and support from WRAP, Defra and the FSA.

Introduction

This guidance builds on the Defra guidance¹ on the application of date marks to food (i.e. 'use by' 'best before'), which is intended to provide an appropriate understanding of how to comply with the legal requirements on date marking. Within the Defra guidance, a worked example of the Decision Tree applied to yoghurt was included. This is given in Appendix 1.

Dairy UK has produced this complementary guidance to indicate the date mark type that is likely to be the correct one for a range of dairy products. This has been determined by using the Decision Tree provided as part of the Defra guidance (further detail on this is provided below). Definitions of the date mark types are also given below.

This guidance also makes recommendations around the optimum storage conditions (for both the unopened and open products).

It should be noted that the Food Standards Agency recommends that consumer-focused guidance on keeping products refrigerated should encourage them to keep products refrigerated below 5°C². Where chilled temperature guidance is given on-pack, it would be helpful to consumers to use 'Keep refrigerated below 5°C'.

WRAP research reveals that there is consumer confusion with regards to how long dairy products can be kept once opened and whether they can be frozen³. WRAP's Retailer Survey also identifies areas of inconsistency in current labelling⁴. A Decision Tree for freezing guidance labelling, developed by WRAP in conjunction with the FSA is included in Appendix 2.

The intention is that future iterations of the guidance will make recommendations around optimum usage instructions and freezing guidance for dairy products.

² See e.g. http://www.nhs.uk/Livewell/homehygiene/Pages/how-to-store-food-safely.aspx

¹ Guidance on the Application of Date Labels to Food, Defra, September 2011

³ Consumer Insight: Date Labels and Storage Guidance, WRAP, May 2011 and Understanding Consumer Use of the Freezer, WRAP, Aug 2010

⁴ Helping Consumers Reduce Food Waste - A Retail Survey 2011, WRAP, Jun 2012.

Application of the Decision Tree approach to milk and dairy products

The Decision Tree approach in the Defra guidance assists the Food Business Operator (FBO) to arrive at the appropriate minimum durability indication, i.e. 'best before', or 'use by'.

The conclusion from the Decision Tree in the case of any specific product follows from answers to three questions:

Q1: Is the food microbiologically highly perishable?

Q2: Is it likely that microbiological changes could result in the food becoming an immediate danger to human health (for example, due to growth and/or toxin production by microorganisms to unsafe levels) after a short period of time?

Q3: Is the food ready to eat (i.e. is it intended by the producer or the manufacturer for direct human consumption without the need for cooking or other processing effective to reduce to an acceptable level or eliminate microorganisms of concern)?

As explained in the Defra guidance all foods should be subject to thorough HACCP-based risk assessment in deciding the date mark to apply and it is ultimately the FBO's responsibility to determine which date mark to apply based on assessment of their specific product and the processing conditions.

Dairy UK's Scientific and Technical Committee, composed of dairy technical experts, has applied this approach to the dairy products listed below. The conclusions the Committee arrived at are summarised in Table A, while Table B gives their answers to the above three questions. In most cases there was consensus, and this is reflected in the table. In the case of a few products, the conclusion was that the appropriate durability indication would depend on the product characteristics, and the particular manufacturing and packing procedures followed. For these products the Scientific and Technical Committee concluded that it would not be appropriate to reach a conclusion and this should be left to the FBO's HACCP-based risk assessment.

It should be noted that ultimately it is the legal responsibility of the food business operator to determine whether to apply a "use by" or "best before" date.

Definition of the date marks

"Use by" Dates

'Use by' date is used for foods which are highly perishable and can, after a short period, cause an immediate health risk; examples are soft cheese and some ready prepared meals. These foods could pose a health risk if consumed after the 'use by' date. It clearly instructs consumers as to the date a product should be used by. The food should remain fit for human consumption until that date, if it has been stored and prepared correctly.

"Best before" Dates

'Best before' dates are usually used on foods that last longer, such as ambient stable, frozen, dried or canned foods. It should be safe to eat these foods for a limited period of time after the 'best before' date, but the food will no longer be at its best. After this date, the food might begin to lose its flavour and texture. Eventually it will spoil. The 'Best before' is the date up to and including which the food can be expected to remain at peak quality if properly stored.

"Display until" Dates

'Display until' dates are not required by legislation but are sometimes given to assist retailers in ensuring that at the time of sale, all food will have an adequate remaining shelf-life. Unfortunately, these dates can reduce consumers' understanding of the 'use by' and 'best before' dates, resulting in food that is still within life being thrown away or, potentially, a food safety risk. Consequently, 'display until' dates are not recommended.

Table A: Labelling guidance by product

Product Category	Durability indication from decision tree	Storage Conditions Unopened	Storage Conditions Opened
UHT Milk	Best before	Ambient	Once opened treat as fresh milk. Keep refrigerated and use within 7 days
UHT Cream	Best before	Ambient	Once opened treat as fresh milk. Keep refrigerated and use within 5 days
UHT Flavoured Milk Drinks	Best before	Ambient	Once opened treat as fresh milk. Keep refrigerated and use within 5 days
Pasteurised Flavoured Milk Drinks	Use by	Keep refrigerated	Keep refrigerated
Pasteurised Milk	Use by	Keep refrigerated	Keep refrigerated
Pasteurised Filtered Milk	Use by	Keep refrigerated	Keep refrigerated
Pasteurised Cream, Clotted Cream	Use by or Best before as decided by the manufacturer's HACCP	Keep refrigerated	Keep refrigerated
Butter, Dairy spreads	Best before	Keep refrigerated	Keep refrigerated
Fat Spreads	Best before	Keep refrigerated	Keep refrigerated
Cultured Creams	Best before	Keep refrigerated	Keep refrigerated
Long Life Yogurts	Best before	Ambient	Keep refrigerated
Long Life Juice	Best before	Ambient	Once opened keep refrigerated
Skimmed Milk Powder	Best before	Store in cool, dry place away from strong odours	Once opened store in air tight container. When made up to liquid milk, keep refrigerated
Yogurts	Use by or Best before as decided by the manufacturer's HACCP (See Worked	Keep refrigerated	Keep refrigerated

Product Category	Durability indication from decision tree	Storage Conditions Unopened	Storage Conditions Opened
	example: Decision tree, Appendix 1)		
Fromage frais	Best before	Keep refrigerated	Keep refrigerated
Mould ripened soft cheese (e.g. Brie, Camembert)	Use by	Keep refrigerated	Keep refrigerated
Fresh Cheese and Cottage Cheese	Use by	Keep refrigerated	Keep refrigerated
BLOCK hard cheese (e.g. Cheddar, Red Leicester, Lancashire, Wensleydale, Cheshire)	Best before	Keep refrigerated	Keep refrigerated
Blue Cheese (e.g. Stilton) retail packs	Use by	Keep refrigerated	Keep refrigerated
Jars of Blue Cheese	Use by	Keep refrigerated	Keep refrigerated
GRATED Cheese (e.g. Cheddar, Red Leicester, Mozzarella, Reduced Fat)	Best before	Keep refrigerated	Keep refrigerated
SLICED Hard Cheese (e.g. Cheddar, Red Leicester, Reduced Fat)	Best before	Keep refrigerated	Keep refrigerated
Cheese with added ingredients	Use by or Best before as decided by the manufacturer's HACCP	Keep refrigerated	Keep refrigerated
Waxed Cheese	Use by or Best before as decided by the manufacturer's HACCP	Keep refrigerated	Keep refrigerated

Table B: Decision Trees: Questions and Answers

Product	Q1: Microbiologically highly perishable?	Q2: Immediate danger to human health?	Q3: Ready to eat?
UHT Milk	Not while pack is unopened	After opening, no	Yes
UHT Cream	Not while pack is unopened	After opening, no	Yes
UHT Flavoured Milk Drinks	Not while pack is unopened	After opening, no	Yes
Pasteurised Flavoured Milk Drinks	Yes	Yes, packaging is not aseptic, any growth could be rapid	Yes
Pasteurised Milk	Yes	Yes, packaging is not aseptic, any growth could be rapid	Yes
Pasteurised Filtered Milk	Yes	Yes, packaging is not aseptic, any growth could be rapid	Yes
Pasteurised Cream, Clotted Cream	Yes	Yes, but monitoring may demonstrate that in practice rapid growth is unlikely	Yes
Butter, Dairy spreads	Yes	No, any microbiological growth is likely to be slow if the product is kept refrigerated.	Yes
Fat Spreads	Yes	No, any microbiological growth is likely to be slow if the product is kept refrigerated.	Yes
Cultured Creams	Yes	No, any microbiological growth is likely to be slow	Yes
Long Life yogurts	Not while pack is unopened	No, any microbiological growth is likely to be slow	Yes
Long Life Juice	Not while pack is unopened	No, any microbiological growth is likely to be slow	Yes
Skimmed Milk Powder	Not while pack is unopened	No, any microbiological growth is likely to be slow	Yes
Yogurts	See detailed yogurt Decision Tree (Appendix 1)	See detailed yogurt Decision Tree	Yes

Product	Q1: Microbiologically highly perishable?	Q2: Immediate danger to human health?	Q3: Ready to eat?
Fromage frais	See detailed yogurt Decision Tree where the principles are similar (Appendix 1)	See detailed yogurt Decision Tree where the principles are similar	Yes
Mould ripened soft cheese (e.g. Brie, Camembert)	Yes	Yes, any microbiological growth is likely to be rapid	Yes
Fresh Cheese and Cottage Cheese	Yes	Yes, any microbiological growth is likely to be rapid	Yes
BLOCK hard cheese	Yes	No, although there may be mould growth this is unlikely to involve toxin production.	Yes
Blue Cheese	Yes	Yes, any microbiological growth is likely to be rapid	Yes
Jars of Blue Cheese	Yes	Yes, any microbiological growth is likely to be rapid	Yes
GRATED Cheese	Yes	No, although there may be mould growth this is unlikely to involve toxin production.	Yes
SLICED Hard Cheese	Yes	No, although there may be mould growth this is unlikely to involve toxin production.	Yes
Cheese with added ingredients	Depends on type of cheese and the nature of the added ingredient	An individual hazard analysis is required.	Yes
Waxed Cheese	Depends on type of cheese	An individual hazard analysis is required.	Yes

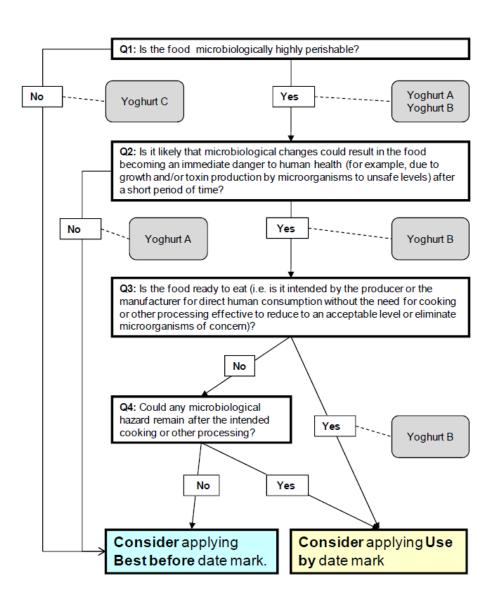
Appendix 1 - Worked example: Decision Tree application to yoghurt

Yogurt A: Produced in factory with good hygiene records demonstrating absence of *Listeria monocytogenes* in product when it leaves factory. Factory has knowledge that because of pH and water activity of product, *Listeria monocytogenes* would not grow in product even if present.

Yogurt B: Produced in factory where hygiene records show very occasional detection of *Listeria monocytogenes*. Factory does not have evidence that *Listeria monocytogenes* will not grow in product.

Yogurt C: UHT yogurt that can be stored at ambient temperature with advice to consumer to eat within 3 days once opened.

Note: Businesses will need to consider the risk posed by all organisms and not just a single pathogen in isolation.



Appendix 2 - Freezing guidance labelling Decision Tree

Freezing is often an area of confusion for consumers.

All dairy products are *safe* to freeze at home, as long as they have been stored correctly, are frozen before the 'use by' date (if applicable), and are defrosted and used within 24 hours (if carrying a 'use by' date).

However, not all dairy products retain the quality expected of them when they have been defrosted e.g. the texture of hard cheese, such as a mature cheddar, can be altered by home freezing.

For this reason, it has not been possible to develop product-level freezing guidance.

This Decision Tree is intended to help manufacturers label products clearly and has been produced by WRAP in conjunction with the Food Standards Agency.

Manufacturers are encouraged to:

- 1. Review products to determine their suitability for home freezing.
- 2. For those foods that are suitable for home freezing, include the 'snowflake' logo on the label, with text 'suitable for home freezing' or equivalent where possible.
- 3. For those products that are marked with the snowflake logo, provide clear and consistent, supplementary guidance. Guidance could be communicated on-pack, online and in-store.

The intention is to help consumers minimise food waste, whilst ensuring consumers enjoy the product at its best. Given not all dairy products retain the quality expected of them when they have been defrosted, extended freezing guidance may not be suitable for on-pack labelling but could be communicated to consumers as supplementary guidance e.g. as part of a recipe, and by campaigns such as Love Food Hate Waste (www.lovefoodhatewaste.com).

WRAP Freezing guidance labelling Decision Tree

- •Yes Lab •No – Lab •NB For th
- •Will the quality deteriorate, during the period between it being purchased and the date mark, to such an extent that the quality of the thawed product may no longer meet consumer \ brand expectations?
 - •Yes Label "Freeze as soon as possible" e.g. bakery
 - •No Label "Freeze before date mark... defrost and use within 24 hours" e.g. fresh meat
 - •NB For those foods that have 'once opened' guidance ('use within x days'), this would also need to be amended e.g. to indicate 'use / freeze within x days'
- How long can it be kept frozen?
- •Will the quality deteriorate, during the period it is in the freezer, to such an extent that the quality of the thawed product may no longer meet consumer \ brand expectations?
- •Yes Label "For best quality, use within 1 month of freezing" e.g. bakery
- •No Label "For best quality, use within 3 months of freezing" e.g. pre-prepared foods

Is any prepreparation required to freeze it?

- •Will the quality of the thawed product be so changed from its pre-frozen state as to no longer meet consumer \ brand expectations?
- •Yes Label with appropriate instructions / provide instructions online or as part of recipes e.g. 'grate before freezing' e.g. cheese
- •No No instructions required

What should it be frozen in?

- •Are there risks of cross-contamination? Is the packaging unsuitable for freezing?
- •Yes Label with appropriate instructions e.g. 'freeze in clean air-tight storage container' e.g. cooking sauce, tinned foods, milk
- •No No instructions required but additional guidance could be provided e.g. online

How should it be defrosted?

- Could the defrosting period present a microbiological risk?
- •Yes Label "Defrost in the refrigerator. Defrost and use within 24 hours" e.g. fresh meat
- •No No instructions required

How should it be used after defrosting?

- Could the defrosted product present a microbiological risk?
- •Yes Label "Cook thoroughly" (Steaming hot) and "Store in the fridge, defrost and use within 24 hours" e.g. fresh meat
- •No Option to label "Try to use it within one to two days after it's been defrosted it will go off in the same way as if it were fresh" e.g. bakery