'Best before' date labels
Protecting consumers and limiting food waste

SUMMARY
The 'best before' date, that is the recommended last consumption date, is often confused with the 'use by' date, intended for foods that are highly perishable (such as fresh meat or dairy products). Recent consumer market surveys in the EU show that only a third of consumers are able to correctly interpret the meaning of the 'best before' date. While knowledge of labelling seems to be better in some countries, consumers throughout the EU have difficulties in understanding the labelling scheme.

Food labelling rules have been put in place to protect consumers and allow them to make informed choices when buying foodstuffs. Labelling therefore concerns not only the EU agri-food sector and its economic weight, but also its 500 million consumers.

Recently some Member States have proposed to scrap 'best before' labelling for certain products like coffee, pasta and rice that have a long shelf-life. This change would help to prevent food waste, which accounts for 90 to 100 million tonnes of food annually in Europe alone, and this figure is expected to grow.

The proposed labelling change could therefore be a solution not only to help end the current confusion among consumers but also to reduce food waste. Food losses occur upstream in the food supply chain, and also because of retailer negligence and consumer misinterpretation of labelling.
Food labelling in the EU

The principles regarding food safety and consumer protection fall under competences shared between the EU and Member States. The latter are responsible for implementing and enforcing EU food legislation, while at EU level, Regulation (EC) No 178/2002 defines the general principles and requirements applicable to food legislation, and provides a framework for a coherent approach in drafting any new legislation in this domain. EU rules on the labelling of foodstuffs are defined in Regulation (EU) No 1169/2011 concerning consumer information on food, which came into force on 13 December 2014, with the exception of the provisions concerning the obligation to provide a nutritional declaration, which will apply from 13 December 2016.

According to EU rules, food labelling must meet specific requirements. It must be in language that is easy for consumers to understand, and, if required, in several languages. EU legislation requires that food products bear an indication of either the date of minimum durability ('best before' date) or of the 'use by' date. These are two very different concepts, the first referring to the quality of products, the second to their safety.

'Best before' and 'use by' dates

The date of minimum durability of a foodstuff is the date up to which food retains its expected quality when it comes to flavour and texture, under proper storage and use. It is indicated as the 'best before' date and appears on a wide range of refrigerated, frozen, dried (pasta, rice), tinned and other foods (vegetable oil, chocolate, etc.). Apart from specific legislation (such as for eggs for direct human consumption), the marketing of foods after their 'best before' date has passed is not prohibited by EU legislation, under the condition that it is still safe and their appearance is not misleading.  

The 'use by' date on the other hand indicates the date up to which food can be eaten safely and is designed for highly perishable food (fresh fish, meat or dairy products).

Improving labelling

Confusion over 'best before' dates

Consumers often struggle to understand the 'best before' date, referring to the expected quality of food, confusing it with the 'use by' date. An EU-27 consumer market study from 2012 revealed that only 36% of consumers correctly interpreted the meaning of the 'best before' date. According to another study from 2013, carried out for the European Commission, 40% of respondents found labels under voluntary food labelling schemes difficult to understand, and a third also considered logos and symbols on such schemes' labels confusing. Dual date labelling (for instance, displaying the 'sell by' date, used by retailers for stock rotation, together with the 'use by' date) on the same product does not make consumers' decisions about buying and discarding food any easier.

Ambiguous labelling is a major factor contributing to confusion about food safety among consumers. It influences their decision whether or not to buy a given food product and encourages potentially wasteful behaviour as food is needlessly discarded. This was confirmed in the findings of a US report which showed that over 90% of Americans occasionally throw edible food away based on the 'sell by' date, out of a mistaken concern for food safety. According to the same report, a casual survey of grocery-store workers found that even employees themselves do not distinguish between different kinds of food labelling dates. In this context it is to be noted that the
Committee on World Food Security also recently called upon all nations to support efforts for coherence, clarification and harmonisation of the meaning and use of food date labelling, at national as well as international level, taking into account the principles of the Codex Alimentarius.

European Parliament
In its resolution of 2012 on how to avoid food wastage, the European Parliament asked the European Commission and the Member States to clarify the meaning of date labels, in order to reduce consumer uncertainty about the edibility of food, and improve the accuracy of information offered to the public. It also called on the Commission to issue recommendations regarding refrigeration temperatures, as well as to assess and encourage measures aimed at reducing food waste upstream, such as dual-date labelling and the discounted sale of foods close to their expiry date or of damaged goods.

In its 2014 resolution on the food crisis, fraud in the food chain and the control thereof, the European Parliament also explicitly noted that the massive-scale fraud involving the unlabelled presence of horsemeat in food items, which undermined consumer trust in the European food chain in 2013, was a symptom of an uncontrollable globalised supply system, cut-price agri-food productivity and an incomplete labelling system. It also enumerated certain fraudulent practices regarding labelling, namely the counterfeiting and marketing of food past its 'use by' date, and called for a uniform definition of food fraud at EU level. It suggested that official controls should focus not only on food safety issues, but also on preventing fraud and the risk of consumers being misled. Moreover, it acknowledged the importance of clear and transparent business-to-business and business-to-customer labelling, calling on the Commission to review food legislation in this area in order to reduce the risk of food fraud.

Recent follow-up
In May 2014, the Netherlands and Sweden called for changes in Annex X of Regulation 1169/2011, to extend the list of food products with a long shelf-life which enjoy a derogation from the obligation to bear a 'best before' date on their packaging. ('Shelf-life' is the period of time over which a product remains safe and meets its quality specifications under expected storage and use). The derogation applies to a number of products, including unprepared fresh fruit and vegetables, wine, drinks containing 10% or more by volume of alcohol, and baked goods normally consumed within 24 hours. The change would mean that several products currently subject to 'best before' labelling, such as rice, pasta or coffee, could also be exempted from this requirement.

A large number of Member States supported the recent call for a change in labelling rules to end the confusion about 'best before' date labelling among consumers, and consequently reduce food waste. On the other hand, there are concerns that relaxing the rules on the 'best before' date for some additional products could weaken the quality and safety of products. As a follow-up the Commission proposed to create a working group to revise the list of products and to start taking initial measures by the end of 2015.

Balancing consumer protection and the fight against food waste
Proponents of scrapping the 'best before' date for products that have a long shelf-life and retain their quality for a very long time primarily support this measure to reduce unnecessary food waste. Food waste is currently estimated at 90 to 100 million tonnes
annually in Europe, and this figure is expected to grow. Reducing this waste would, in turn, help create a more sustainable food system and alleviate food poverty, as advocated in the United Nations' 'Zero Hunger Challenge'. As seen above, existing EU legislation already exempts certain foodstuffs from the obligation to indicate a 'best before' date. Scrapping this labelling for products like coffee, rice and pasta would also help reduce some burdens on the agri-food chain.\(^5\)

Inconsistent labelling and packaging is also problematic for retailers and wholesalers, as it is difficult, time consuming and costly to check the vast amount of items in stock and those on display in stores. Scrapping 'best before' dates for some products that do not represent health risks would lower the costs of stock monitoring and stock rotation, allowing more resources for controls and targeted enforcement activities for those products that could pose an immediate risk to human health.

As indicated in a UK report on Better regulation of 'Use by' date labelled foods, large retailers can have around 3 500 'use by' dated product lines in store, which can correspond to around 50 000 individual items with a 'use by' date on sale in a large supermarket at any given time. Trying to ensure that items beyond their 'use by' date are not offered for sale can be extremely complicated, bearing in mind the differences in the label location on the pack, font and size. Removing 'best before' dates and focusing on 'use by' dates for highly perishable food would – in the eyes of consumers – also increase the importance given to labels placed on products that do present safety concerns.

On the other hand, consumer confidence in the food chain has been severely shaken by scandals such as that involving horsemeat in 2013, which raised questions about food chain control, food fraud and mislabelling.\(^6\) Further relaxation of the labelling scheme could therefore deepen consumer mistrust and render control over products exempted from 'best before' labelling less transparent, thereby prompting an increase in fraudulent packaging and labelling practices. Incorrect and fake labelling remains a significant form of food fraud, as evidenced by the seizing of thousands of tonnes of fake foods and drinks in the Interpol-Europol Operation Opson III in February 2014. In fact, coffee and rice, together with wine and fruit juices that already benefit from the 'best before' date labelling opt-out, are among the 11 products most affected by food fraud, according to a research paper reviewing cases of food fraud since 1980. Scrapping the 'best before' labelling for those specific products could therefore further increase their vulnerability to fraud, since they might also be subject to less rigid control. However, it is hard to assess the potential impact that a change in date labelling would have on the vulnerability to fraud of specific products.

Consumer organisation BEUC argues in favour of keeping the 'best before' date, claiming that consumers are entitled to know until what date they will get the quality of the food product they expect and pay for. In its opinion, there could even be some safety aspects involved with, for instance, the migration of certain components from the packaging into the food after a certain period of time (for instance, bisphenol-A from tin-can coatings). BEUC believes that it is quite unfair and arbitrary to place the blame for food waste solely on consumers, and that the issue deserves more than window-dressing measures. It claims that 'best before' dates help consumers manage their food stocks at home and to apply the 'first in, first out' principle to their kitchen cupboard. It notes that helpful as it might be, the date of manufacture cannot replace the 'best before' date, as in the absence of any shelf-life information, consumers might
even throw away more food, if they no longer recall when they bought the product in question and/or feel unsure of its quality.

**Additional means of improving the situation**

Raising public awareness on labelling in general would be one complementary measure for tackling misunderstanding of 'best before' date labels. Since EU legislation allows the marketing of foodstuffs that are past their 'use before' date (provided that they are still safe and their presentation is not misleading), national measures setting out different conditions under which such foodstuffs may be marketed could also help consumers to better understand the meaning of the label.

Certain challenges that the use of the 'best before' date poses are also related to semantic issues. The 'best before' date term in French (à consommer de préférence avant) for instance, seems to create a lot more confusion for French consumers, namely because of its similarity with the 'use by' term (à consommer jusqu'au). Finding better terminology could in this case perhaps also help address the issue of misinterpretation. In January 2014, the French Economic and Social Committee proposed to consider abolishing the 'best before' date altogether while keeping the 'use by' date for certain types of products, in line with standards based on indisputable and coherent scientific facts. BEUC suggests using more realistic food dates. Furthermore, it advocates reconsidering the use of 'use by' dates for some foodstuffs and even replacing them with 'best before' dates, as differences on the EU market still exist when it comes to determining whether a given food (e.g. yoghurt) should bear a 'use by' or 'best before' date.

**New technology helps boost sustainable consumption**

The whole new concept of the internet of things could also help extend the shelf-life of foodstuffs within the food chain. By being able to track the temperature at which products are stored throughout the supply chain, the period of guaranteed quality and safety of food could be prolonged. Similarly, some companies are already using data analysis to help juggle the shelf-life of many of their products. With past experience about consumers' seasonal taste, or knowledge on how well promotions have worked in different outlets, machine learning programs can be used to generate suggested stock levels.

Cloud technologies and social media are also being harnessed. In the past, companies would e-mail orders to their suppliers individually. Now they are putting all their suppliers on cloud-based collaboration platforms, where they are able to see orders in real time, tracking the status of deliveries. All this helps them to reduce delivery times, consequently prolonging the availability of a product on the shelves, as well as its 'sell by' date.

Developments in sustainable packaging design could also contribute to the sustainability of packed foods in a number of ways. Better packaging can result in more distant 'best before' dates, and better 'resealable' mechanisms can contribute to slower deterioration of food in opened packaging. New apps and software that warn consumers when food items should be used up could also make an important contribution at the consumer level.
Further reading

Food waste website, European Commission.

Valérie Léau, Information Sources on Food Safety, EPRS, June 2014.

User Guide to Standard 1.2.5 – Date Marking of Food, Food Standards in Australia and New Zealand, December 2013.


Endnotes

1 Greece has adopted a specific practice whereby goods past their ‘best before' date are to be separated from others.


3 See point 1(d) in Annex X to Regulation (EU) No 1169/2011 for the full list of derogations.

4 The biggest share of EU food waste is produced by households (42%) and by the agriculture and food processing sector (39%). One of the causes at consumer level is the lack of information and confusion about the meaning of expiry dates; other behaviour also causing waste includes preparing over-generous portions, and buying excessive quantities or bulk buying, often linked to work patterns which reduce time for daily shopping.

5 See study on changes in sensory quality characteristics of coffee during storage and a similar study on rice.

6 As a response, a new regulation on official controls in applying food and feed law was proposed by the Commission in 2013. It has already been adopted by the Parliament with amendments and welcomed by some NGOs, including BEUC.