

What do food date labels *really* tell you?

John C. Meyer

While strolling through the supermarket aisles, consumers are inundated with a multitude of food date labels. Some feature “sell-by” dates, which indicate the last recommended date merchants should offer the product for sale. Others are phrased as indicators of when consumers should use the product (e.g. “best if used by”) and still others are expiration dates, such as “expires on” or “use by.”

These labels do not have quite the meanings one would expect. “Expires on” doesn’t necessarily mean a product is actually dangerous or not as nutritious after the expiration date, as the temperature and way it is stored may affect its longevity. “Best if used by” (or simply “best by”) generally means that one may find the product less enjoyable or less nutritious after the indicated date and is more commonly used on items that do not perish quickly, including goods such as peanut butter, cooking oil, or tomato paste. Some foods do not feature a phrase at all, such as canned soups, and merely feature a date without specification whether a food starts to spoil on that date or simply will not be as high-quality.

The most specific are “sell by” dates, which are mandated for some perishable products in most states and are used most commonly on foods such as milk, meat, poultry, fish, eggs, and bread. Label mandates for such perishables require stores to date perishable products so they will still be good if purchased by the sell-by date, and often for a period thereafter which varies by product, from a day or two for meat and fish to several weeks for eggs.

Unlike in Europe, where there is extensive EU-wide regulation, in the United States, there are very few federal requirements for date labels on food, except for infant formula and baby food. Nearly all food date label regulation is determined at the state level and varies widely, both as to the meaning of date labels and as to which foods must be labeled.

Both in the United States and in Europe, freshness labels did not come into widespread use until the 1970s. In most instances, labeling was at first a voluntary practice, pioneered by private companies and only later regulated by government entities. For example, in Great Britain, Marks and Spencer initiated date labeling internally in the 1950s, but government regulations were not put in place

until the 1970s. In the United States, many of the labels consumers encounter remain voluntary.

Food date labeling and safety

Food date labeling does not guarantee food safety and foods consumed after their best-by or even after their expiration dates are not necessarily unsafe. The two most important factors in food safety are the preparation and handling of food by the producer and the seller, as well as the preparation and handling of the food by the consumer. Food may be well within its freshness dating and still be dangerous if bacterial contamination has occurred in its preparation and processing, or if it has not been properly refrigerated before sale to the consumer. Similarly, if food, especially meat, fish, or poultry, is not properly refrigerated after purchase, it can become a health hazard in a matter of hours. Finally, if such foods are not cooked properly, they are not safe to consume, even if all other precautions have been taken. The most effective consumer precaution for perishable foods is to inspect them and to discard anything that does not appear or smell normal.

Food waste and food date labels

According to the U.S. Department of Agriculture, an estimated 31 percent of the food available for consumption in the U.S. at the retail and consumer levels goes uneaten – a figure that rises to 40 percent and amounts to \$165 billion when taking farm-to-retail food loss into account. Further, a report by the Natural Resources Defense Council found that American consumers waste roughly 25 percent of the food and beverages they buy. This includes spoilage and throwing away leftovers, but some estimates indicate that up to 10 percent of food is thrown away while still safe and nutritious. Much of this waste occurs due to the misunderstanding of food date labels. Many consumers dispose of any food past its best-by or use-by date and some even dispose of it after its sell-by date, even though that date is intended to indicate that the food will be good for at least a few days after purchase.

Some experts even advocate the removal of food date labels, because of the food waste they attribute to these labels. Others advocate a uniform, detailed set of federal regulations to solve this problem; however, is not the

cure-all it may appear to be. Such an endeavor would be expensive for producers and sellers to implement – costs that would end up being passed on to the consumers – and the associated expenses would vary according to the amount of detail required on packaging. Such a plan may also be ineffective; even in Europe, consumers still throw away food unnecessarily because they believe it is outdated. A 2014 report by the House of Lords concluded that 89 million metric tons (roughly 98 million U.S. tons) of food are wasted across the European Union per year.

The problem is twofold: inconsistency in labeling and consumer misinformation as to the significance of those labels. To address the inconsistency problem, an alternative to extensive federal rules would be for state or federal agencies, working together with food industry trade groups (representing producers, sellers, and other stakeholders) to develop a recommended set of definitions for some of the more common terms. This approach may be time-consuming, but it has worked well and allowed flexibility and innovation in other areas, for example in the Uniform Commercial Code. To address the second part of the problem, consumer education campaigns, preferably undertaken by a partnership between government and the food industry, are a promising method.

Food date labeling is much more extensive than required by regulation

Forty-one states require at least some food date labeling; however, most limit these requirements to certain categories of food products. Sell-by dates are the most common labels required, so other designations, such as “best used by” or “expiration date,” are usually voluntary industry initiatives. The most common food regulated is raw shellfish, which is regulated in over 20 states, often as the only state-regulated food. Eggs and milk, or in some states, all dairy products, are the other two most commonly regulated products. A few states, notably Michigan, Minnesota, Ohio, Oregon, and Washington, require sell-by dates on a broad category of perishable foods (which include the aforementioned shellfish, milk, and eggs).

Industry response to consumer demand has been the primary driver behind food date labeling. Some of the state-mandated labeling is, however, more responsive to industry interest in managing supply. Such is the case with Montana’s rule that milk must have a sell-by date no more than 12 days after pasteurization, even though it remains good for a substantially longer period after pasteurization. (This also means that milk in Montana is typically much more expensive than in states without such regulations.)

Even imperfect food date labeling is useful to a rational consumer

Despite these weaknesses, food date information is valuable to rational consumers. Many consumers check

sell-by dates and select ones with more distant dates if they do not expect to use the perishable item immediately. A post-purchase use of this information is that if consumers don’t remember when they bought a product, the date label lets them know what is old and needs to be checked and either thrown away or used quickly. If a consumer has more than one of an item, even a non-perishable item, these labels make it possible to be sure to use the older items first. Food date labeling also expands consumer choice; some consumers may consciously and with full information choose to consume only fresher products, irrespective of the safety of older products. ◀