

Consumer Perceptions of Date Labels: National Survey

Authors:

Emily Broad Leib, Christina Rice, Roni Neff, Marie Spiker, Ali Schklair, Sally Greenberg



Background & Methods

Each year, 40% of the United States food supply goes to waste.¹ The growing, transporting, processing, and disposing of this uneaten food costs us \$218 billion each year, and two thirds of this lost economic value is due to household food waste.² An important driver of household food waste is consumer confusion over date labels.³ Date labels are those dates that are applied to foods and accompanied by prefixes such as “sell by,” “best before,” and “use by,” among others. A U.K. study found that 20% of consumer waste occurs because of date label confusion.⁴

Because date labels are not federally regulated and state-level regulations, where they exist, are inconsistent, consumers face a dizzying array of unstandardized labels on their food products. Many people throw away food once the date passes because they mistakenly think the date is an indicator of safety, but in fact for most foods the date is a manufacturer’s best guess as to how long the product will be at its peak quality. With only a few exceptions, the majority of food products remain wholesome and safe to eat long past their expiration dates. When consumers misinterpret indicators of quality and freshness for indicators of a food’s safety, this increases the amount of food that is unnecessarily discarded. A recent report found that standardizing date labeling is the most cost-effective solution for reducing food waste, and could help to divert 398,000 tons of the food that is wasted each year.²

We conducted a survey to gain further insights into consumer perceptions of date labels. This survey was fielded online to a demographically representative sample of 1,029 adults from April 7-10, 2016. These questions were part of a CARAVAN® omnibus survey that is conducted twice a week by ORC International. The findings presented here are one piece of a larger analysis of consumer perceptions of date labels.

Take Home Messages

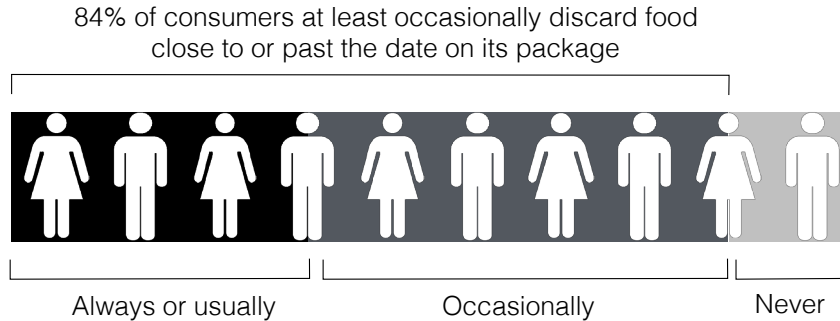
Our findings confirm that consumers use date labels to make decisions about discarding food: over one third always discard food close to or past the date on the label, and 84% do so at least occasionally. One-third of consumers wrongly think that date labels are federally regulated, and another 26% are unsure. The survey found that for future date label standardization, some labels would be particularly effective in communicating with consumers. “Best if used by” was most commonly seen as an indicator of food quality (70%) and only 12% viewed it as a food safety label. “Expires on” was most commonly seen as an indicator of food safety (54%), and relatively few respondents (23%) saw it as referring to quality. Because all six of the labels we tested are currently used as quality indicators, many foods with the “expires on” label are unnecessarily wasted. We can build on consumer perceptions of the meanings of different labels to help consumers better identify date labels that indicate safety, versus those that are only intending to communicate peak quality.

Millenials were more likely to view date labels as indicators of food safety, more likely to think date labels are federally regulated, and more likely to discard food past the date on the label.

Detailed Findings

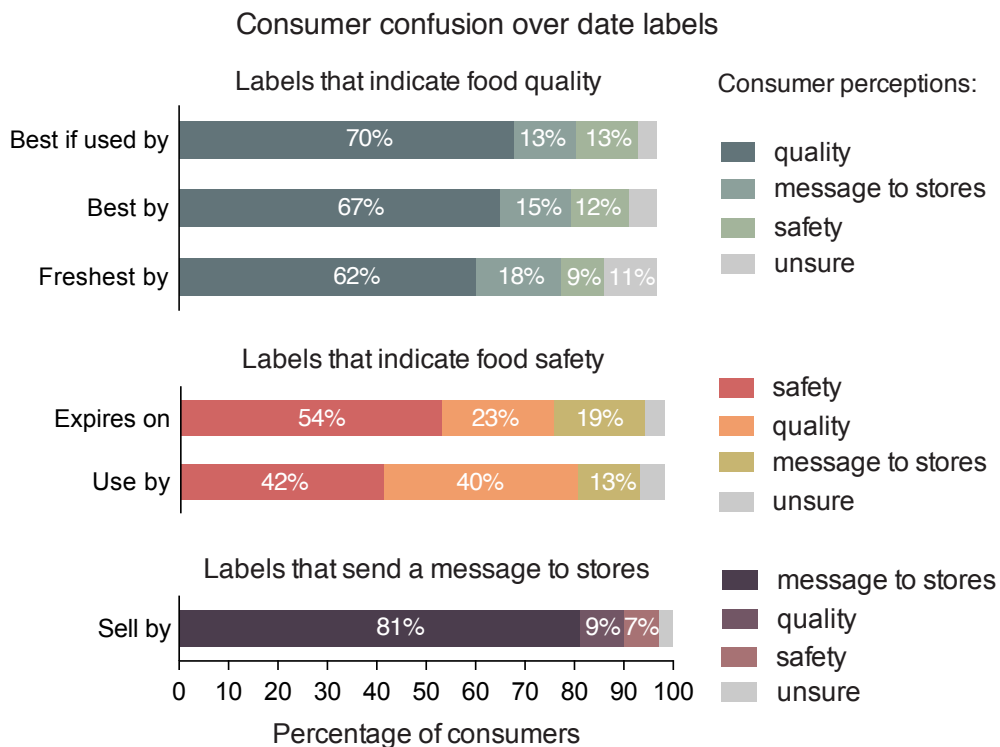
Consumers use date labels to make decisions about discarding food.

Over one third of the population (37%) says they always or usually throw away food because it is close to or past the date that appears on the package. 84% of consumers throw out food based on date labels at least occasionally. Notably, younger consumers (age 18-34) were most likely to discard food based on the date label, while older consumers (65+) were the least likely to do so.



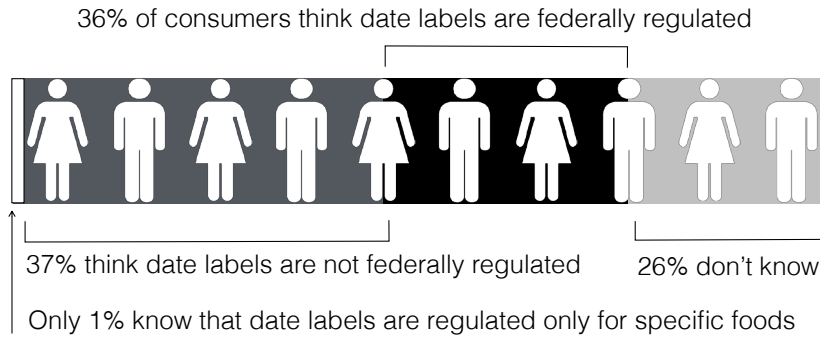
Consumers have misperceptions and uncertainty about what date labels actually mean.

We examined perceptions of six date labels: “best by,” “best if used by,” “expires on,” “freshest by,” “sell by,” and “use by.” The survey found a striking amount of diversity in interpretation of the meaning of these labels, suggesting a need to standardize labeling and better educate consumers. The labels most commonly perceived as indicators of **food quality** were “best if used by,” “best by,” and “freshest by,” which were perceived as indicators of quality by 70%, 67%, and 62% of consumers, respectively. Both “best if used by” and “best by” were also relatively unlikely to be misperceived as food safety labels. However, “freshest by” was more confusing to consumers, with 9% seeing it as a food safety label and 11% unsure of the meaning. About half the respondents saw “expires on” (54%) as an indicator of **food safety**. Many respondents also saw “use by” (42%) as an indicator of food safety; however, 40% of respondents perceived “use by” as a quality label. The majority of consumers correctly interpreted the “sell by” label as an **indicator to stores** about when to stop selling food (81%). Nonetheless, still 7% saw it as a safety label and 9% as a quality label. Younger consumers (age 18-34) were most likely to view all of these labels as food safety labels, while those aged 65+ were least likely to do so.



One-third of consumers wrongly think that date labels are federally regulated.

There was considerable uncertainty and misinformation about whether the federal government regulates date labels. 36% of the population wrongly answered that date labels are federally regulated, and 26% were unsure. Only 1% said they are federally regulated only for specific foods, which is technically the correct answer: the only food for which date labels are regulated federally is infant formula; all other foods are regulated at the state level or not at all, depending on the state. Those who were more likely to think that labels are federally regulated included younger consumers (18-34), African Americans, Hispanics, households of three or more, and households with children.

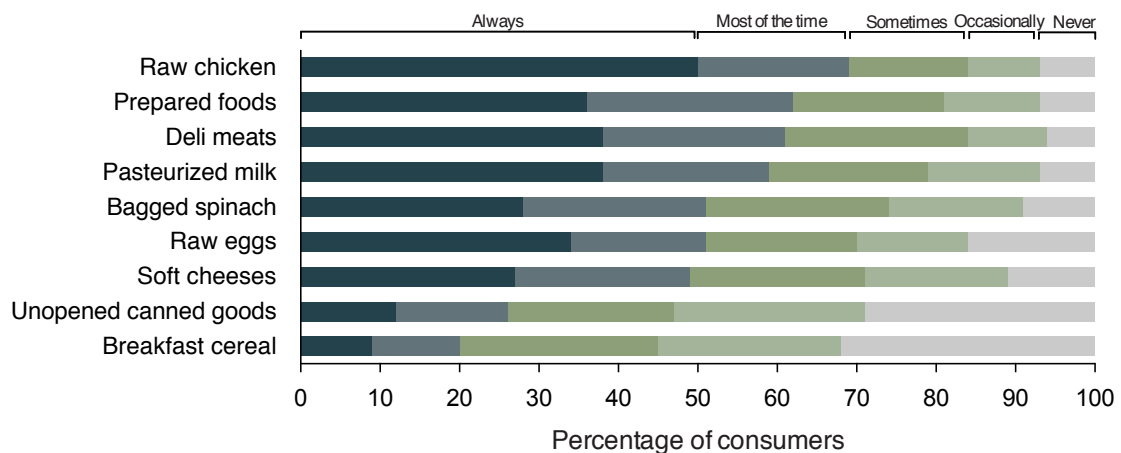


Consumers' willingness to throw away foods past the "use by" date depends on the food.

Consumers were also asked about their frequency of discarding food based on the "use by" label. We found that they were most cautious about raw chicken, with 50% of all respondents "always" throwing away raw chicken past the "use by" date. Consumers were least cautious about unopened canned goods and breakfast cereal. But even for these less perishable foods, 12% and 9% of consumers still reported that they "always" throw away canned goods and breakfast cereal, respectively, past the "use by" date. For those foods most likely to cause concern, consumer perceptions of the "use by" label may translate into large amounts of food wasted: raw chicken, pasteurized milk, and deli meats were thrown away "always" or "most of the time" by 69%, 59%, and 61% of consumers, respectively. Of those products, only deli meat has been shown to increase in risk after the date.⁵

Younger consumers (18-34) were more likely to "always" discard foods past the "use by" date. This was true for all foods except raw chicken and prepared foods, for which rates of discarding past the date were uniformly high across age groups. Households with children were more likely than households with no children to discard multiple foods. Household income did not affect willingness to throw away food past the date, by and large, but the lowest income category (less than \$35k/year) was more likely to "never" discard raw chicken and deli meats – more expensive items – past the "use by" date.

How often do consumers report discarding foods that have passed the "use by" date?



Conclusion

This survey aimed to understand the extent to which consumers are confused about date labels, learn about their perceptions regarding whether labels are federally regulated, and identify which labels most clearly communicate quality versus safety. This report confirms previous findings that consumers are confused by date labels. As a result, they unnecessarily discard food with a high frequency, which can be a significant contributor to the wasted food problem in the United States. In addition, as millennials were more likely to view date labels as indicators of food safety, more likely to think date labels are federally regulated, and more likely to discard food past the date on the label, survey findings show that work is needed to ensure that food waste does not continue to increase with future generations of consumers. Survey results also identified those date labels that most clearly communicate safety versus quality, which can be helpful as industry, nonprofit organizations, and policymakers examine options to improve consumer awareness by standardizing date labels across the food supply.

Survey results indicate that standardizing date labels and increasing consumer education on the meaning of date labels can help to reduce the significant amount of food that consumers unnecessarily discard. Consumers discarding less food can help meet the U.S.'s national food waste reduction goal to halve the country's level of food waste by 2030, and it can decrease the amount of precious resources that are wasted producing food that unnecessarily ends up in the landfill instead of on consumer's plates.

References

- ¹ Hall KD, Guo J, Dore M, Chow CC. The progressive increase of food waste in America and its environmental impact. *PloS one*. 2009 Nov 25;4(11):e7940.
- ² ReFED. A Roadmap to reduce consumer food waste by 20 percent. 2016. www.refed.com
- ³ Harvard Food Law and Policy Clinic and National Resources Defense Council. The Dating Game: How confusing date labels lead to food waste in America. 2013. <http://www.chlpi.org/wp-content/uploads/2013/12/dating-game-report.pdf>
- ⁴ Waste & Resources Action Programme. Consumer insight: date labels and storage guidance. 2011. <http://www.wrap.org.uk/content/consumer-insight-date-labels-and-storage-guidance>.
- ⁵ United States Department of Agriculture. Quantitative Assessment of Relative Risk to Public Health from Foodborne *Listeria monocytogenes* Among Selected Categories of Ready-to-Eat Foods. 2003. <http://www.fda.gov/downloads/Food/FoodScienceResearch/UCM197330.pdf>.