FOOD WASTE PREVENTION RESOURCE GUIDE SERIES: DATE LABELS
Up to 40% of the food supply is wasted in the United States. Reducing this staggering number and meeting national goals to reduce food waste requires consumers to make meaningful changes to how they buy, store, prepare, and consume food. Yet, food waste remains off the radar for many consumers. According to a 2019 study, one in five people never consider food waste in their decision-making while eating at home or grocery shopping. More than two-thirds of people never consider food waste while eating out. Providing effective education is a proven strategy to help address this lack of awareness. Consumer education has the potential to divert an additional 3.22 million tons of wasted food, prevent 18.7 million metric tons of CO₂ emissions, and provide a financial net benefit of $15.8 billion.

Increased consumer attention to the issue may also push businesses to operate more responsibly. The Nashville Food Waste Initiative (NFWI) aims to provide food waste education to everyone in Nashville, from business owners and staff to educators to students. Originally developed in 2015 as a pilot project by NRDC, NFWI is now led by Urban Green Lab (UGL) in partnership with the Environmental Law Institute (ELI). UGL offers trainings that include information on how to reduce food waste in classrooms, households, and workplaces.

ELI and UGL collaborated to create the Food Waste Prevention Resource Guide Series to help expand food waste content in UGL trainings and provide ready-to-use resources for other sustainability non-profits or similar organizations creating their own trainings or curriculums.

The Resource Guide Series highlights five proven food waste prevention strategies: packaging design and use, date labels, meal prepping and kits, storage and freezing, and plate and portion size. Each Resource Guide covers one of the five topics, includes key tips as well as a list of helpful resources, and is organized into three charts tailored to a different audience—classrooms, households, and workplaces. Some resources appear across multiple charts.

Organized by both resource type (columns) and topic (rows), the Resource Guide Series provides a straightforward way for sustainability educators to find vetted content for building effective, fact-based trainings.

There are no consistent federal standards for food date labels, with the exception of baby formula. This lack of standardization means some labels, such as “Best if Used by,” refer to peak freshness of food (as estimated by the manufacturer), not food safety—which can confuse consumers and cause them to throw out edible food.

NOTES: The Resource Guides provide targeted resources on specific food waste prevention strategies. More free information on food waste prevention, reduction, and recycling, including general overviews, are widely available such as from USDA, NRDC, ReFED, WRAP and World Wildlife Fund. Additionally, though the Resource Guides largely compile free resources from governments, NGOs, and academics, note that there are also private and/or paid resources that can provide useful information on food waste prevention (e.g., Dana Gunders’ Waste-Free Kitchen Handbook, LeanPath).
There are no consistent federal standards for food date labels, with the exception of baby formula. This lack of standardization means some labels, such as “Best if Used by,” refer to peak freshness of food (as estimated by the manufacturer), not food safety—which can confuse consumers and cause them to throw out edible food.

The table below compiles free resources for teaching classrooms about sustainable choices to reduce food waste through interpreting date labels.
KEY TAKEAWAYS FOR DATE LABELS IN CLASSROOMS

When teaching about date labels, educators should be able to:

▶ Explain that food waste contributes to climate change through unnecessary use of energy and resources, as well as emissions generated during landfill decay.

▶ Explain how lack of date label standardization and confusion around date label interpretation can lead to food waste.

▶ Articulate why date labels can be confusing and clarify date label terminology.

▶ Share how students can tell if food is spoiled and no longer safe to eat by using their senses, including looking for changes in appearance, smell and texture (e.g., moldy bread or lumpy milk).

▶ Educate students about how they can engage with elected officials and other community members to encourage sustainable practices such as reducing food waste.

▶ Help students understand the impacts of their own actions and how they can discuss and help implement sustainable practices at home.

“Training educators to bring a sustainable lens to the classroom is crucial for culture change in a community. If we want to push the dial for sustainability in a meaningful way, we need to ensure educators have the confidence and tools to deepen the standards they are already teaching while connecting to the real world outside of the classroom.”

- CHRISTINA LANGONE, DIRECTOR OF EDUCATION, URBAN GREEN LAB
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NRDC, *The Dating Game: How Confusing Food Date Labels Lead to Food Waste in America* (2013): Policy brief that examines the historical impetus for placing dates on food, relevant federal law, and connection to food waste.


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<td>WWF, <em>The No Food Waste Game</em> (2020): Educational game for students that challenges players to think of different ways to prevent food waste generally.</td>
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<td>The Scholarship System, <em>5 Ways Students Can Get Involved in Politics (And Why They Should)</em> (2023): Blog that explores ways students can be politically active and engage with elected officials and community members.</td>
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<td>Wonderoplis, <em>How Are Expiration Dates for Food Determined?</em> (n.d.): Article and activities that show how date labels are determined and can contribute to food waste.</td>
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<td>Carolyn Beans, TED-Ed, <em>Food Expiration Dates Don’t Mean What You Think</em> (2023): Video that explains the history of date labeling, how date labels contribute to food waste, and potential solutions.</td>
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<td>Food Standards Scotland, <em>It’s a Date!</em> (n.d.): Classroom activity that educates children ages 7 to 9 about date labels and how to prevent food waste.</td>
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### Lesson Plans & Classroom Activities

- **ReFED, Test Your Date Label Knowledge** (n.d.): Quiz that tests knowledge on date labels.
- **ReFED, U.S Food Waste Policy Finder** (n.d.): Map that shows date labeling policies and in-depth explanations by state.
- **Foodspan & John Hopkins Center for a Livable Future, Our Wasted Food** (2023): 50-minute lesson plan that teaches students about food waste and potential solutions, with extension projects that will further empower students to take action.

### Reports & Articles

- **University of Connecticut, Expiration, Use-By and Sell-By Dates: What Do They Really Mean?** (2019): Article that provides an explanation of date labeling terminology.
- **Chris Hunt, Food Print, Are Food Date Labels a Waste of Food and Money?** (2013): Blog that explains date label regulations and recommendations for improving the system.
- **Xaq Frohlich, The Washington Post, Mandatory Date Labels on Food Could End Confusion and Prevent Food Waste** (2023): Article that analyzes an example of federal legislation on date labels.

### Creative Media

- **Let’s Teach, How Are Expiration Dates Determined? Are They Just Suggestions?** (2021): Video that explains date labels and how to use your senses to determine if food is spoiled.
- **Harvard Law School Food Law and Policy Clinic, EXPIRED? Food Waste in America** (2016): Film and corresponding discussion guide that reveals the consequences of patchwork date labeling regulations.

For more information: Linda Breggin, ELI Senior Attorney (breggin@eli.org) and Todd Lawrence, UGL Executive Director (todd@urbangreenlab.org).
DATE LABELS: HOUSEHOLDS

There are no consistent federal standards for food date labels, with the exception of baby formula. This lack of standardization means some labels, such as “Best if Used by,” refer to peak freshness of food (as estimated by the manufacturer), not food safety—which can confuse consumers and cause them to throw out edible food.

The table below compiles free resources for teaching households about sustainable choices to reduce food waste through interpreting date labels.
KEY TAKEAWAYS FOR DATE LABELS IN HOUSEHOLDS

When teaching about date labels, educators should help households:

- Understand that food waste contributes to climate change through unnecessary use of energy and resources, as well as emissions generated during landfill decay.

- Understand how lack of date label standardization and confusion around date label interpretation can lead to food waste.

- Understand date label terminology and the current federal and state regulations on date labels.

- Learn to recognize food spoilage using senses instead of relying solely on date labels, including by looking for changes in appearance, smell and texture (e.g., moldy bread or lumpy milk).

- Be able to name foods that can commonly be kept past the date label (e.g., eggs, packaged breads).

- Evaluate the impacts of their own actions and how they can adopt more sustainable practices at home and encourage businesses, schools, and other institutions to do the same.

"Educating residents to find simple, sustainable solutions within their homes impacts the entire city. Once sustainability has been integrated into the everyday lives and actions of households, that knowledge then pours into our relationships, neighborhoods, and communities."

- KARISSA HAMPTON, SUSTAINABLE HOUSEHOLDS MANAGER, URBAN GREEN LAB
## Key Resources on Food Waste

### Reports & Case Studies

### Creative Media
- **Our Changing Climate,** *Food Waste Causes Climate Change. Here’s How We Stop it.* (2020): Video that provides key food waste statistics and possible avenues for change.

### Ready-to-Use Resources
- **ReFED,** *Resources & Guides* (n.d.): Compilation of online food waste tools that includes a food waste monitor, solutions database, impact calculator, and policy finder.

### Toolkits & Similar Resources
- **U.S. EPA,** *Too Good to Waste Implementation Guide and Toolkit* (n.d.): Comprehensive toolkit that provides strategies and resources for consumers and educators to engage in food waste reduction activities.

### Articles
- **Bloomberg,** *The US Has a Food Waste Problem and It’s Getting Worse* (2023): Article that provides an overview of food waste trends and key numbers.
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<td>USDA, <em>FoodKeeper</em> (n.d.): Guide that lists by when foods should be consumed.</td>
<td>Kristin Salaky, <em>You Can Still Eat Food After Its Expiration Date if You Keep These Factors in Mind</em> (2021): Article that explains factors that help determine whether food is safe to eat.</td>
<td>Times Foodie, <em>How to Check if the Eggs Are Fresh or Spoiled</em> (n.d.): Short video that demonstrates how to test whether eggs are spoiled.</td>
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Reports & Case Studies

NRDC, *The Dating Game: How Confusing Food Date Labels Lead to Food Waste in America* (2013): Policy brief that examines the historical impetus for placing dates on food, relevant federal law, and connection to food waste.

Ready-to-Use Resources

ReFED, *Test Your Date Label Knowledge* (n.d.): Quiz that tests knowledge on date labels.

ReFED, *U.S Food Waste Policy Finder* (n.d.): Map that shows date labeling policies and in-depth explanations by state.

Articles

NPR, *To Reduce Food Waste, FDA Urges ‘Best If Used By’ Date Labels* (2019): Article and audio that informs consumers about federal recommendations to standardize date labels.

Chris Hunt, Food Print, *Are Food Date Labels a Waste of Food and Money?* (2013): Blog that explains date label regulations and recommendations for improving the system.


For more information: Linda Breggin, ELI Senior Attorney (breggin@eli.org) and Todd Lawrence, UGL Executive Director (todd@urbangreenlab.org).
DATE LABELS: WORKPLACES

There are no consistent federal standards for food date labels, with the exception of baby formula. This lack of standardization means some labels, such as “Best if Used by,” refer to peak freshness of food (as estimated by the manufacturer), not food safety—which can confuse consumers and cause them to throw out edible food.

The table below compiles free resources for teaching workplaces about sustainable choices to reduce food waste through interpreting date labels.
KEY TAKEAWAYS FOR DATE LABELS IN WORKPLACES

When teaching about date labels, educators should help workplaces:

- Understand that food waste contributes to climate change through unnecessary use of energy and resources, as well as emissions generated during landfill decay.

- Understand how lack of date label standardization and confusion around date label interpretation can lead to food waste.

- Understand date label terminology and federal, state, and local regulations for donating food past or near the date indicated on the label.

- Look for opportunities to partner with other organizations to promote awareness and action on date label standardization.

- Understand the ability of workplaces to reduce food waste through sustainable choices and knowledge-sharing within their workforce, customer base, and business communities.

"It's a wonderful experience to distill complex scientific information into tangible actions for citizens to digest and utilize in their own way. If an attendee walks away from one of my trainings doing just one or two new sustainable activities that add value to their life, that's a huge win. Connecting people to resources in sustainability that are vetted and accurate is one of the best things we can do to empower them to make long-lasting changes."

- JACQUELINE GOODWIN, ASSISTANT DIRECTOR OF WORKPLACES, URBAN GREEN LAB
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<td>The Chancery Lane Project, <em>Reducing Supply Chain Food Waste</em> (2022): Model contractual clause that can be used by businesses to reduce food waste in their supply chains in order to reduce greenhouse gas emissions and realize financial benefits.</td>
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<td>Bloomberg, <em>The US Has a Food Waste Problem and It’s Getting Worse</em> (2023): Article that provides an overview of food waste trends and key numbers.</td>
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### Reports & Case Studies

**NRDC, The Dating Game: How Confusing Food Date Labels Lead to Food Waste in America** (2013):
Policy brief that examines the historical impetus for placing dates on food, relevant federal law, and connection to food waste.

### Ready-to-Use Resources

**ReFED, Test Your Date Label Knowledge** (n.d.):
Quiz that tests knowledge on date labels.

**ReFED, U.S Food Waste Policy Finder** (n.d.):
Map that shows date labeling policies and in-depth explanations by state.

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Article and audio that informs consumers about federal recommendations to standardize date labels.

**Chris Hunt, Food Print, Are Food Date Labels a Waste of Food and Money?** (2013):
Blog that explains date label regulations and recommendations for improving the system.

### Creative Media

**ABC News, New Plan to Change Food Labels** (2023):
Video that explains the case for standardized food date labeling.

### Toolkits & Similar Resources

**U.S. Food and Drug Administration, Social Media Toolkit for Food Loss and Waste** (2022):
Toolkit that includes model social media posts on food waste including those on date labels.

Article that analyzes an example of federal legislation on date labels.

Article that offers strategies for individuals to engage with elected officials and community members to enact change.
Reports & Case Studies


Articles

Leah Butz, Hunter College New York City Food Policy Center, *“Expiration” Dates: Can You Donate Past-Date Packaged Foods?* (2021): Article that explores the reasons for and against donating past-date foods.

For more information: Linda Breggin, ELI Senior Attorney *(breggin@eli.org)* and Todd Lawrence, UGL Executive Director *(todd@urbangreenlab.org).*
Thank you to Natural Resources Defense Council for reviewing the resources included in this guide.