



REFRESH NEBRASKA

Stop the Rot

3rd Edition

Identifying Food Waste in America

According to EPA, food is the number one material entering landfills today, constituting some 22% of all Municipal Solid Waste (MSW). In fact, nearly 40% of food produced in this country each year goes to waste, at a time when 1 in 7 Americans are food insecure. So what exactly is considered food waste, where does it come from, and why does it occur?

The answer to the first question isn't always clear, as statistics seem to vary wildly depending on their source. For instance, EPA uses a food waste baseline of 38 million tons per year while the USDA number is closer to 67 million tons. The difference is largely a matter of priorities. The USDA number takes a broad view, defining food waste & loss as "reductions in edible food mass anywhere along the food chain". The EPA number doesn't include containerized food, and concentrates on areas where action can be taken to keep waste out of the landfill. Put another way, EPA only includes perishable waste going to landfills from consumer-facing businesses and homes, while the USDA number represents all edible food waste, including that from farms and manufacturers.

For what it's worth, even then the numbers don't tell the full story, as foodstuff raised for energy production and other commercial uses are not included. Nor are the 22 million tons of estimated manu-

facturer waste that end up being used in animal feed each year. That said, USDA does include some 10 million tons of farm waste that gets tilled under due to fluctuating commodity prices and labor costs, not to mention in-store cosmetic standards that keep imperfect-looking produce off the shelves. While it doesn't end up in the landfill, USDA still considers it waste since composting is merely an end of life alternative, and uses often exist further up the Food Recovery Hierarchy.

No matter which number you use, an important takeaway is that farms and manufacturers deal with food waste in a relatively efficient manner, while the vast majority of recoverable waste occurs at the retail level and in the home. While estimated tonnage of food waste continues to vary at this level as well, two things are generally agreed upon: 1. The majority of food waste comes from perishable foods and 2. Abundant availability has allowed the perception of freshness to drive food waste ever higher.

According to USDA, some 80% of waste comes from perishable foods - fruits & vegetables, milk & dairy, grain products like bread & bakery items, as well as meat & seafood. As the term implies, these foods go bad more quickly than processed items. Having said that, the perception that they're going bad, or are close to it, often has a greater effect

on their lifespan than actual spoilage.

When asked what they look for in a grocery store for instance, many customers cite a good produce section, especially in terms of quality and quantity. In response, grocers tend to overstock product displays which in turn leads to early blemishing of items at the bottom of the pile, and their early removal. As shocking as it may sound, many grocers actually consider perishable food waste a good thing, and have built it into their retail models as a sign of proper quality control practices - the more food waste a produce department generates, the more attention is paid to ensuring good looking bins.

Product dating of dairy, bread and meats is also largely driven by perceived freshness, often leading to the premature disposal of these items as well. Terms like Best Before, Use By, or Sell By have nothing at all to do with the potential for contamination, but instead denote the date after which producers will no longer guarantee perceived freshness. Sight and smell are better tools for identifying when food has gone bad than package dating, but customers tend to trust dates more than their own senses, so grocers often remove items days before the date is reached.

Increasingly, stores are also serving ready to eat food at their deli
(Continued on next page)

counters, where near empty item bins can also effect customer perceptions of freshness. As a result, stores often keep them well stocked right up until closing, when remains are often thrown away. The same holds true for buffets, convenience stores and institutional food services like those found in hospitals, retirement homes, and campus dining facilities. Indeed, many of the freshness issues facing grocers affect dining establishments in a similar way, including full service restaurants, at least to some extent. For instance, much like overfilled vegetable and deli bins, restaurants often overstock kitchens in an effort to maintain extensive menu choices at all times. Perceived freshness can also lead to wasteful prep practices among kitchen staff eager to plate only the best looking food.

The other half of the story for restaurants can be summed up as plate waste, where unwanted accompaniments and oversized portions result in an average 17% of meals left uneaten. Studies in portion size reveal significant growth over the past 30 years. For instance, the caloric value of the average slice of pizza has increased 70% over that time and the average caesar salad 100%. In fact it's not uncommon for restaurants to serve portion sizes that are two to eight times larger than USDA or FDA recommendations.

With that we reach the final destination for the majority of food, the average American home, where as much as 55% of food purchases are not part of a meal plan. Here again, over purchasing can lead to food spoilage, provided misperceptions over label dating doesn't get it first. In all, it's estimated that each of us toss 25% or between 300 and 400 lbs of food a year, and the average family of four spends \$1,500 on food that ends up being wasted. Thanks to the cheap and abundant availability of food in this country, many households have become complacent about food waste to the point that even those who consider themselves environment or cost conscious, pay little or no attention to the food they waste.

Over the last 5 years, numerous groups and government agencies, including EPA and USDA, have turned increasing attention to this growing problem, with the federal government calling for a 50% reduction in food waste by 2030. In that time, numerous studies have been completed, leading to a variety of waste reduction roadmaps and action plans. In our next edition, we'll explore some of the farm to fork measures that just may help us meet that goal. If food waste is a problem you've addressed in your own home or business, and would like to share some of your strategies, please contact me at pstadig@knb.org - we'd love to hear them!



Hy-Vee finds success with The Misfits fruit & produce

Ugly is in. Especially when it comes to the produce aisle at Hy-Vee stores. Until recently, "cosmetically challenged" apples, tomatoes,

peppers and other fruits and vegetables never used to make it to the shelf, due to food industry standards for size and shape. Now things are starting to change.

Misfits, a partnership between Hy-Vee and Robinson Fresh, one of the world's largest produce companies, made its debut in January and has since enjoyed overwhelming customer support. Launched as a way to combat food waste and offer a variety of fruits and vegetables at a lower cost, "ugly" produce now sells at a steady pace.

"We understand that there is product left in the field because farmers don't think there's a market for it," said Hunter Winton, Robinson Fresh general manager. "With the Misfits program, farmers have an outlet to sell more produce and customers have an opportunity to save money and help reduce waste."

The program provides customers more fruit and vegetable variety at a lower cost while also helping to reduce produce waste. Four to six Misfit items are delivered to stores weekly, based on what is seasonably available, and are sold on average at a 30 percent discount. Some of the line's items include: peppers, cucumbers, squash, apples and tomatoes.

However imperfect, the produce has grown in popularity, first in Europe and now in the United States. "It took a while to get going, but there has been a lot of local press about it within the last month," said Mike Burzlaff, produce manager at the Brookings, South Dakota, Hy-Vee.

"The beauty of this program is that the produce tastes the same and is of the same high quality, it just looks different. As the saying goes, you can't judge a book by its cover. The same is true for Misfits fruits and vegetables," said John Griesenbrock, Hy-Vee's vice president of produce/HealthMarkets.

Shoppers seem to feel good about saving the planet while saving up to 30 percent. In all, one million pounds of fruits and vegetables that would have become landfill waste ended up in Hy-Vee shopping carts over the first four months of the program.

Keep Nebraska Beautiful would love to learn what your family, school, or business are doing to reduce, reuse & recycle food waste. Drop us an email at pstadig@knb.org and we'll do our best to publish it in this space!

REFRESH RECIPES

Shopping your fridge first is an important strategy for reducing food waste. Here's a recipe idea that will help you use what you have before buying more!

FROMAGE FORT

This classic spread uses up cheese odds and ends, transforming them into a perfect pairing for crackers, crudités, or baguettes.

SERVINGS:
2 cups

USES UP:
Cheese Rinds

Use a combination of cheeses on hand to make this hearty spread. The more strongly flavored ones will dominate the flavor. The subtle, nutty flavor of sherry brings it all together. Make a day or two ahead so flavors have time to blend.

INGREDIENTS:

1 lb cheese rinds and ends, firm cheeses grated
1 garlic clove
1 Tbsp softened butter, or heavy cream
1/2 cup white wine or sherry
1 Pinch of dried thyme (optional)
Salt and freshly ground black pepper (to taste)

DIRECTIONS:

Run a food processor (fitted with chopping blade) & drop in the garlic clove to mince. Add cheese & butter. Blend. Add wine & thyme, & blend again. Season with salt & pepper to taste. Scrape into container & cover. Refrigerate at least overnight or for up to a week. Enjoy on toast or crackers. Add vegetables, such as mushrooms, roasted root vegetables, or a few slices of olive to fromage-fort-topped crostini & heat in the broiler for a quick hors d'oeuvre.

CREDIT: From "Eat it Up!" by Sherri Brooks Vinton, Da Capo Lifelong Books, 2016

For those of you dedicated to the old school card file recipe box, here's the recipe in a 3"x5" format to print

FROMAGE FORT



SAVETHEFOOD.COM

FROMAGE FORT:

This classic spread uses up cheese odds & ends in a perfect pairing for crackers, crudites, or baguettes

Servings: 2 cups

Uses up: Cheese Rinds

Use a combination of cheeses on hand to make this hearty spread. The more strongly flavored ones will dominate the flavor. The subtle, nutty flavor of sherry brings it all together. Make a day or two ahead so flavors have time to blend

INGREDIENTS:

1 lb cheese rinds and ends
1 Tbsp softened butter or heavy cream
1 pinch dried thyme (optional)
1 garlic clove
1/2 cup white wine or sherry
Salt & freshly ground pepper (to taste)

DIRECTIONS:

Run a food processor (fitted with chopping blade) & drop in the garlic clove to mince. Add cheese & butter. Blend. Add wine, thyme, & blend again. Add salt & pepper to taste. Scrape into container & cover. Refrigerate overnight or up to a week. Enjoy on toast or crackers. Add vegetables like mushrooms, roasted root vegetables, or a few slices of olive to fromage fort topped crostini & broil for a quick hors d'oeuvre.

CREDIT: From "Eat it Up!" by Sherri Brooks Vinton, Da Capo Lifelong Books, 2016

FOOD STORAGE TIPS FROM SAVETHEFOOD.COM

FRUITS

BERRIES

REFRIGERATE IT: Yes **AT FRESHEST:** Raspberries, blackberries, & strawberries, 2-3 days; blueberries, 10 days

OPTIMAL STORAGE: Do not wash until ready to use. Blueberries - store either in original container or covered container. Raspberries, blackberries, & strawberries - store in single layer, on a shelf in the fridge in an aerated container on a tray lined with cloth, & covered loosely with another cloth. If space is constrained, add 2nd & 3rd layers with cloths between them. For strawberries, leave green caps until ready to eat.

FREEZING: Blueberries - rinse, dry, & pack loosely into rigid airtight container. Raspberries & blackberries - rinse, dry, place separated on baking sheet, & freeze, then transfer to airtight container. Strawberries - rinse, dry, remove stems, place uncovered, cut side down on baking sheet lined with wax paper, & freeze, then transfer to airtight container. Many recipes don't require thawing berries; if a recipe does require thawing, let sit at room temperature for an hour or so. If necessary, transfer to a colander to drain. Capture juice & use to flavor drinks or for other recipes.

USE IT UP/REVIVAL: If a small amount of berries in a container show mold, do not discard entire container. Pick through & toss those that are bad. Do this as soon as possible to prevent mold from spreading. To bring out the flavor of lackluster berries, put in a bowl (hull & slice strawberries first), sprinkle with a little sugar, & let sit for 15 minutes. Sugar will draw moisture from the berries to make a sweet natural syrup.

CITRUS

REFRIGERATE IT: Yes **AT FRESHEST:** Counter, 4 - 5 days; refrigerator, 3 - 8 weeks

OPTIMAL STORAGE: Store loose in low-humidity crisper drawer. Do not put in plastic bag or airtight container. Peeled or cut oranges should be refrigerated in airtight container or bag. If you have a citrus tree, the best way to store is to leave the fruit on the tree until you are ready to use. Citrus can stay good for months on the tree.

FREEZING: Rinse, peel, divide into sections, & remove seeds & membranes. Slice if desired. Then pack in 40% syrup. Citrus can be frozen in water or juice without the sugar, but may have a less desirable texture & color & take longer to thaw. Navel oranges can become quite bitter when frozen.

USE IT UP/REVIVAL: Citrus can be ripe even if rind is still green in places. The inside may be good even if peel shows signs of damage. Open & investigate before tossing. Fruit that has slight discoloration is usually acceptable to eat.

Peels/rinds— Often called “zest,” the outer portion of citrus peels can be used to flavor soups, stews, or pasta sauces. Use vegetable peeler to pull strips of zest (the thin, colored outer portion of the peel) off the fruit, arrange on a plate, & let dry, then store in a jar in pantry. Strips can also be candied & pickled. Citrus peels have numerous uses around the house, such as to make cleaning supplies.

To download the entire Food Storage Guide, go to

www.savethefood.com/food-storage

QUICK TRICKS

Food tossed is money lost.
Refresh still edible foods, re-purpose leftovers
and reuse or “recycle” them in new ways.

VEGETABLES

1. Freeze chopped mature onions by adding directly to a freezer bag. Lay flat to freeze. To separate the onions before use, give bag a slight “whap” on kitchen counter.

2. Freeze extra bell peppers in shapes needed for recipes. Freeze for a few hours on a baking sheet with sides until hard. Transfer to a freezer bag.

3. Puree extra vegetables in a blender or food processor and heat with pasta sauce. Possible vegetables include carrots, butternut squash, red bell peppers & zucchini.

4. Freeze extra tomato paste in tablespoon-size portions in an ice cube tray. Transfer to a freezer bag. Adding a tablespoon or two of tomato paste to soups, casseroles & pasta sauce enhances the flavor of these foods with its concentrated, almost meaty taste.

For more ideas on how to makeover your leftovers, go to:
food.unl.edu/cook-it-quick-documents/makeover-your-leftovers.pdf

brought to you by

N UNIVERSITY OF NEBRASKA-LINCOLN
Institute of Agriculture and Natural Resources
NEBRASKA EXTENSION



**A FAMILY OF FOUR SPENDS \$1500
A YEAR ON FOOD THEY DON'T EAT**

COOK IT, STORE IT, SHARE IT,
JUST DON'T WASTE IT.

SAVETHEFOOD.COM



REFRESH NEBRASKA is published quarterly by
Keep Nebraska Beautiful

3201 Pioneers Blvd., Suite 118, Lincoln, NE 68502
Telephone: (402) 486-4562 Fax: (402)486-4563
Web Site: <http://www.knb.org> Email: info@knb.org

Funded by the Nebraska Waste Reduction & Recycling Incentive
Fund administered by NE Department of Environmental
Quality & the contributions of our KNB Supporters.