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## Winning on Reducing Food Waste



**More than 1/3 of all available food is not eaten due to waste or loss.**

The U.S. has an abundant supply of food to feed all people, but much of it is wasted. Now is the time to change!

Food waste is a top priority for the top U.S. government organizations of the U.S. Department of Agriculture, the U.S. Environmental Protection Agency, and the U.S. Food and Drug Administration. This collaboration has announced six key priorities which include:

1. Enhance interagency coordination

2. Increase consumer education and outreach efforts
3. Improve coordination and guidance on food loss and waste measurement
4. Clarify and communicate information on food safety, food date labels, and food donations
5. Collaborate with private industry to reduce food loss and waste across the supply chain
6. Encourage food waste reduction by Federal Agencies in their respective facilities

What will you do in your communities to get the conversation, education, and champion in reducing food waste? Tossed food reduces economic growth, reduced community health, and damages the environment.

Learn more at <https://bit.ly/2D21EeX>.

## Seasonal and Simple

Looking for a simple way to find seasonal foods? Look no further than Seasonal and Simple!

This app, developed by the University of Missouri, also includes Kansas

State University Extension, University of Nebraska Extension and Iowa State University Extension.

The free app includes farmers market located

near you, recipes, seasonal produce, and much more.

Learn more at <http://seasonalandsimple.info> and download from your app store.



## The Safety of Cooked Rice

Rice is used in a variety of ways in many meals. But it, like other grains, must be handled safely to prevent foodborne illness. Some may say leftover rice should never be reheated or to not even eat cold cooked rice. Let's look at this issue.

Grains in general can carry *Bacillus cereus*

spores. Like all spores, they can survive cooking temperatures. Therefore, temperature abuse can lead to foodborne illness especially if not properly cooled. Improper cooling can allow spores to germinate, produce toxin, and then foodborne illness occurs.

We've all heard of the Temperature Danger

Zone! Serve rice hot and cool leftovers quickly. Place in shallow containers for faster cooling. If serving leftover rice hot, reheat until piping hot, at least 165°F. Rice can also be served cold in foods such as a vegetable salad.

Source: <https://bit.ly/2uXWhZU>



**Common foods linked to *B. cereus* include cooked rice, cereal dishes, sauces, soups, meat pies, and unpasteurized milk.**

## What is *Bacillus cereus*?

*Bacillus cereus* is a pathogen that produces toxins. Two types of illnesses can occur, one causes diarrhea, the other causes nausea and vomiting.

The diarrheal type can occur within 6-15 hours

with watery diarrhea and cramps. The vomiting, or emetic, type can occur within 30 minutes to 6 hours. The illness is typically gone in 24 hours.

Drink lots of fluids and get rest. If symptoms

worsen, see a doctor.

The best defense is controlling temperature of foods as *B. cereus* can multiply quickly at room temperature.

Source: <https://bit.ly/2qrr8yj>

## USDA Updates Food Product Dating Fact Sheet

To help educate consumers on food product dating, the USDA has updated their fact sheet on this topic.

Links within the fact sheet include information on shelf-stable foods and adding "Freeze By" date information to freeze a food and maintain quality. The commonly used phrases are "Best if Used By/Before", "Sell By", "Use By", and "Freeze By". The only one that is critical to safety is "Use By" for infant formula. Otherwise, the dates are for best quality.

More information is included on food donation and reducing food waste. This helps food companies donate food that may be misbranded or economically adulterated, but are still safe to consume.

Learn more at <https://bit.ly/2X0A9dp>.



**Except for infant formula, product dating is not required by Federal regulations.**

## Food vs. Supplements



Spinach and other leafy greens are great sources of vitamin K.



New research shows that eating nutritious food can reduce mortality rates. This research was conducted by the Friedman School of Nutrition Science and Policy at Tufts University. They collected data from over 27,000 adults ages 20 and older.

When comparing consumption of nutritious food versus dietary supplements, there is evidence that getting certain nutrients from food reduces rates of all-cause mortality. Dietary supplements do not show any reduction. They found the following:

- Lower risk of death from eating foods with adequate vitamin K and magnesium;
- Lower risk of cardiovascular disease from foods with adequate vitamin K, vitamin A, and zinc;
- Higher rates of death from cancer when more than 1,000 mg/day Calcium were consumed from supplements.

Source: <https://bit.ly/2DbfLP3>

## 2017 Census of Agriculture

The results of the USDA 2017 Census of Agriculture are now available. The data is available on national, state and county levels. Some key points nationally are:

- Average farm income is \$43,053.
- Family owned farms and ranches make up 96% of all farms and ranches.
- There are 2.04 million farms and ranches with an average size of 441 acres.

Kansas data can be found at <https://bit.ly/2U7Rijf>.

**In the 2017 census, female producers increased nearly 27% from 2012. The average age of all producers is 57.5 years.**



<https://bit.ly/2GhBZAO>

## Are Bacteria Lurking in Your Spice Cabinet?

Consumer behavior studies reveal telling insights into what food preparation methods they use. In a recent study, consumers were observed preparing turkey burgers and a chef's salad to see what steps they did during meal preparation.

When preparing the turkey burgers, almost 50% of the participants handled spice containers without washing their hands after handling raw turkey. This observation was unexpected. Previous observation studies did not sample spice containers for contamination. Also, if spice containers are not stored inside cabinets, those containers could be contaminated more easily.

What to do? Plan ahead. Measure out spices before handling raw meat so they are ready to use. If containers are handled with dirty hands, clean the containers before putting them back in storage.

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## Knowledge for Life

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## What is Kombucha?



**Kombucha**  
Photo courtesy Pixabay

Originally from Ancient Asia, kombucha is now a modern beverage. While many cite a variety of health claims, the clinical science to back those claims is lacking. Excess consumption can lead to chemical acidosis.

Kombucha is a fizzy, cider-like beverage made from fermented sweet tea. A starter culture, called SCOBY (*Symbiotic Colony of Bacteria and Yeast*), is the key to fermentation and looks like a jelly pancake in the kombucha liquid. The SCOBY is af-

ected by climate, geography, culture, and wild microorganisms making each batch of kombucha unique.

When making kombucha at home, care must be taken to use safe, hygienic practices to keep a clean environment and minimize contamination. In general, kombucha is considered non-alcoholic. But if the alcohol level exceeds 0.5 percent alcohol by volume, then the sugar or yeast concentration is too high or it was fermented too long. In general, home fermentation is around three days.

Pregnant women or those with immune-compromised health conditions should not consume kombucha. Improperly made kombucha can contain pathogens or have unsafe concentrations of organic acids.

Sources: <https://bit.ly/2uW7gTF>; Food Technology, March 2019; Food Protection Trends, Oct 2018

## Tools and Tips for Foods Judges

Fair season is almost here and it's time for those who judge foods and food preservation to

get caught up!

Two publications have been recently updated. They are:

- Food Safety Recommendations for Food Preservation Exhibits—4H712

No bake foods containing raw flour are not allowed. And example would be a no bake cookie made with raw flour.

Please pass along these resources to ALL food judges for their review. They are at [www.rrc.k-state.edu/judging/index.html](http://www.rrc.k-state.edu/judging/index.html).



Videos on judging are also available at [www.rrc.k-state.edu/judging/index.html](http://www.rrc.k-state.edu/judging/index.html)

- Judge's Guide for Foods & Nutrition Exhibits—4H488