

You Asked It!

Tips From the Rapid Response Center

KANSAS STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION AND COOPERATIVE EXTENSION SERVICE

July 2014



Inside this issue:

Freezing Foods	2
Farmers Market Handouts	2
Cherries	2
Seasonings	3
Advantame	3
Baking Foam Cakes	3
Raw Milk	4
Power Outage Food Safety	4

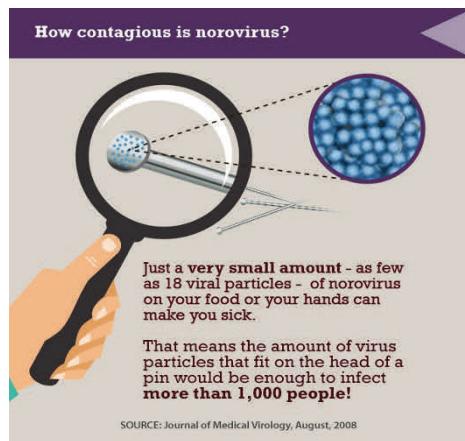


Now on Facebook and Twitter!

- On Facebook—www.facebook.com/KSREfoodie
- On Twitter—@KSREfoodie



Norovirus is #1



While being ranked at the top is typically a good position, being the leading cause of foodborne illness is daunting. Norovirus is now in that top spot.

About 20 million people get sick from norovirus each year, most from close contact with infected people or by eating contaminated food. Infected food workers cause about 70 percent of reported norovirus outbreaks from contaminated food.

Norovirus often gets attention for outbreaks on cruise ships, but those account for only about one percent of all reported norovirus outbreaks. Norovirus is very contagious, and outbreaks can occur anywhere people gather or food is served. People with norovirus usually vomit and have diarrhea. Some may need to be hospitalized and can even die. Infected people can spread norovirus to others through close contact or by contaminating food and surfaces.

You may hear norovirus illness called "food poisoning" or "stomach flu." It is true that food poisoning can be caused by noroviruses. But, other germs and chemicals can also cause food poisoning.

Norovirus illness is not related to the flu, which is a respiratory illness caused by influenza virus.

Learn more at www.cdc.gov/vitalsigns/norovirus/index.html.

Oregano Oil Attacks Norovirus

While oregano adds flavor to many meals, the component carvacrol in oregano oil is showing promise in fighting norovirus.

Researchers at the University of Arizona found

that oregano oil and especially carvacrol, breaks the outer layer of protein around norovirus to allow the antimicrobial to attack it and kill the virus.

While more research is

needed on this, it shows the oregano oil and carvacrol could be effective as a natural sanitizer to restrain human norovirus.

Source: <http://bit.ly/1oaCWe9>

Freezing Foods at Home

Freezing food is easy and convenient. Using proper preparation of the food can result in high quality, nutritious foods.

Vegetables must be water or steam blanched to stop enzymes in the food from changing texture, flavor, color and nutrition. Blanching also helps kill bacteria.

Fruits also contain enzymes that cause browning and vitamin C loss. Ascorbic acid is an effective treatment to stop enzymes changes in fruit.

Because fruits and vegetables are over 90 percent water, freezing will cause cell walls holding the water to break. This results in softer produce

when thawed. Serving frozen produce partially thawed can reduce this liquid loss.

Freeze foods quickly for better quality. Set freezer temperature to the lowest setting. Use a freezer thermometer to monitor the temperature. Freeze foods in small batches for faster freezing.



Source: <http://bit.ly/NQzWp4>

Learn more at www.rrc.ksu.edu/p.aspx?tabid=29

▼ Farmers Market Handouts

Looking for a farmers market near you?
Explore the [From the Land of Kansas website](#).

Fair season is quickly approaching and farmers markets are in full swing.

To help educate consumers on shopping safely at farmers markets and storing fresh produce,

Dr. Londa Nwadike has two handouts available to use at fairs or other events.

They are available in a single page or in half-sheet (front and back)

formats to get two handouts per piece of paper. Look for these at www.ksre.ksu.edu/FoodSafety/p.aspx?tabid=39

It's Cherry Time!

Tart cherries grown in Kansas and are ready to pick in June and July. They are a treat any time of day. The average tree yields 7,000 cherries to make 28 pies. Cherry trees can live about 25 years. The tart flavor relates to the anthocyanin content. Commercially, tart cherries are primarily processed to be frozen, dried, or made into juice or wine.

Here are some ideas to use tart cherries.

- [Preserving Cherries](#)
- [Cherry Marketing Institute recipes](#)



Traverse City, Michigan claims the title of Cherry Capital of the World.

More Reasons to Season Foods



The [McCormick Science Institute](#) helps fund research on the health benefits of herbs and spices.



Research is growing on how herbs and spices are functional foods, not just flavor additives. Cinnamon could help regulate blood sugar. Ginger may reduce muscle and joint pain. Rosemary, thyme, and turmeric may help improve heart health.

At least 2,000 phytonutrients have been identified in several herbs and spices. Some have antimicrobial properties. In grilled meats, some herbs such as rosemary, turmeric and fingerroot (Chinese ginger) can reduce the formation of carcinogenic heterocyclic amines.

Herbs and spices can also help consumers increase vegetable intake. Cruciferous vegetables, such as broccoli, can be unpleasant for some consumers. Their aversion to broccoli is genetically influenced. But by adding spices to broccoli, the broccoli flavors are masked and more acceptable in taste.

So spice it up! Herbs and spices can help give more reasons to season.

Source: Healthier Eating Made Flavorful: Reasons to Season, David Heber, MD, PhD, UCLA Center for Human Nutrition IFT Annual Meeting and Food Expo, July 2013

Introducing Advantame

The newest high-intensity sweetener, Advantame, has been approved by the Food and Drug Administration as a general purpose sweetener for food.

Advantame is about 20,000 times sweeter

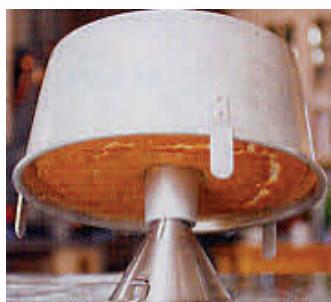
than sucrose. It has been approved for use in baked goods, non-alcoholic beverages (including soft drinks), chewing gum, confections and frostings, frozen desserts, gelatins and puddings, jams and jellies, processed fruits

and fruit juices, toppings, and syrups.

Advantame can partially replace sugar, high fructose corn syrup, or other artificial sweeteners.

Sources: <http://1.usa.gov/1hg86LJ> and www.advantame.com/us.htm

Advantame is available to food manufacturers. It is the 6th high-intensity sweetener approved by the FDA.



Tube pans should not be greased so that the cake will cling to the pan.

Why are Foam Cakes Baked in Tube Pans?

Tube pans are traditionally used to bake foam cakes such as angel food cakes, sponge cakes and chiffon cakes. But it's not just for looks. There is a functional reason.

Foam cakes have very little flour and therefore, very little gluten to give the cake strength. The egg white foam is very delicate and needs help to retain volume. The tube pan is the answer!

As the egg foam bakes, the batter rises and clings to the sides and center tube. After baking, the pan and cake must be cooled upside down to maintain the cake structure. A traditional cake or jelly roll pan will cause the cake to fall in the middle.

Source: Cook's Illustrated, July 2013

Kansas State
University
Research & Extension

Rapid Response Center
221 Call Hall
Manhattan, Kansas 66506

Phone: 785-532-1673
Fax: 785-532-3295
Email: kblakesl@ksu.edu

Knowledge for Life

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, John Floros, Director.



Photo courtesy USDA/ARS

Since the 1920s, milk has been pasteurized to kill disease-causing bacteria. But many consumers choose to consume raw milk.



Illnesses from raw milk are 2.2 times higher in states that legally sell raw milk. In Kansas, it is legal to sell raw milk directly from the

farm. From 2007 to 2012, outbreaks have increased nationwide.

- 81 outbreaks resulted in 979 illnesses, 73 hospitalizations, no deaths.
- Most infections were from cattle that appeared healthy.
- 81 percent of outbreaks were in states that legally sell raw milk.
- 59 percent of illnesses from raw milk were in children aged <5.
- For every outbreak reported, many go unreported.

Learn more at
<http://1.usa.gov/1xdMc5v>



Karen Blakeslee, M.S.



On the Web at
www.rrc.ksu.edu



Saving Food During a Power Outage

When the power goes out, saving food is possible but it depends on many factors. Here are some tips.



- The refrigerator should stay cold about 4 hours when kept closed.

- Keep a refrigerator thermometer inside the appliance. If the temperatures is 40°F or below, food can be saved.
- Discard any food (such as meats, eggs, leftovers, etc.) that has been above 40°F for two or more hours.

Learn more at
www.ksre.ksu.edu/FoodSafety/p.aspx?tabid=20