

# You Asked It! Tips From the Rapid Response Center

KANSAS STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION AND COOPERATIVE EXTENSION SERVICE

December 2020

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# **Storing Eggs Safely**



Storing eggs safely is important for quality and safety. Some older methods of storing eggs are not recommended today due to advancements and knowledge of egg safety. One method that has recently surfaced is storing eggs in lime water which is not recommended.

When this method was popular in the early 1900's, they thought that eggs were sterile inside and all bacteria came through the shell after the eggs were laid. But research shows that *Salmonella enteritidis* can contaminate the eggs as they are being formed inside the reproductive organ of the hen and there is no way a person can know it is there or not.

Since the method requires using unwashed eggs, they will likely come from smaller flocks. A study from Penn State University determined that small, home flocks have a much higher incidence of *Salmonella* than large commercial operations.

Another concern is about using lime water and the fact that it could seep through the egg shell. The risk of storing eggs for long periods of time include loss of nutrients, several oxidative reactions, changes in protein functionality, and a strong bitter taste from the lime.

A study from <u>USDA Agricultural Re-</u> <u>search Service</u> compares how eggs are stored in Europe and how eggs are stored in the U.S. Results showed that refrigeration is best for safety and quality.

Learn more about safe egg storage in this USDA publication, <u>Shell Eggs from</u> <u>Farm to Table</u>.

# **New "Feed Your Mind" Materials**

The "Feed Your Mind" program is a consumer education initiative to provide science-based information on genetically engineered foods, commonly called GMOs or genetically modified organisms. New videos and consumer facts sheets are now available. There are also Spanish translations of fact sheets and infographics.

Another addition is a high school curriculum for the

2020-2021 school year called "Science and Our Food Supply: Exploring Food Agriculture and Biotechnology."

Learn more at <u>https://</u> bit.ly/3I74JOS.

#### What is Aspergillus?

Every day, people breathe in *Aspergillus* spores with no adverse issues. But this mold can be a problem for those at high risk or with weakened immune systems.

Molds are made of many cells. While you can see some with the naked eye, a microscope will show root threads that grow into the food, a stalk rising above the food, and spores that form on the ends of the stalks. The colors of mold are the spores. The roots can grow deep into the food. So what you see on the surface is not the entire mold.

In the case of home canning, the water bath processing method will easily destroy mold on highacid foods when processed properly. But if any seal defect is present, air and contaminants can get inside the jar and cause spoilage.

More information can be found in <u>Molds on Food:</u> <u>Are They Dangerous?</u>



This mold grew inside a home canned food with a defective seal. Photo courtesy: Becky Reid, FCS Agent, Cowley County



See a nutritional comparison of various leafy greens at <u>https://</u> <u>bit.ly/352groj</u>.

#### **All About Lettuce**

A majority of lettuce grown in the U.S. comes from California and Arizona. A new consumer website is now available to educate consumers about the farming practices, the safety measures used, and more. This website comes from the California Leafy Greens Marketing Agreement.

The information includes details about many varieties of lettuce, and there are quite a few! Food safety practices are critical for this vegetable. And the nutrients in lettuce are beneficial for many reasons.

Learn more at <u>https://</u> lettuceinfo.org/.

### **Using Frozen Vegetables**

While fresh vegetables can be a risk for foodborne illness, there have been instances where frozen vegetables have been linked to foodborne illness outbreaks.

It is important to handle frozen produce properly to prevent the spread of germs to your food and kitchen. From research, the USDA found:

- When preparing the frozen corn for a salad, almost all participants in the study failed to follow the manufacturer's instructions to check that it reached a safe internal temperature of 165 degrees Fahrenheit. A food thermometer is the only safe way to know if it reaches that temperature.
- Even if you are preparing a cold salad, frozen produce must be cooked first.



Source: https://bit.ly/32nbpkB



The From the Land of Kansas program has been existence since 1978.

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#### **Helping Kansas Entrepreneurs**

Starting your own business can be a challenge. For Kansas entrepreneurs, the <u>From</u> the Land of Kansas program can lend a helping hand.

From the Land of Kansas seeks to help any business making 100% Kansas made products. This includes a variety of items, but the most popular is food products.

The program can also help businesses with e-commerce which can reach many more customers through their established network. There are also free benefits such as web listings and Facebook groups.

Financial assistance programs and also assistance with agriculture stress resources are also a benefit.

Membership to From the Land of Kansas is a la carte, you choose the services that best work for your business.

Learn more about this program and others services for entrepreneurs through the <u>KSRE First Friday E-calls</u>.

#### **Cleaning Silicone Baking Mats**

Lots of baking will happen for the holidays very soon! If you use silicone baking mats, they can build up a sticky, and even stinky, residue. This residue can be difficult to remove. One method to clean up silicone mats is to place the mat on a wire rack inside a rimmed baking sheet. Bake in a 450°F for about one hour, or until it stops smoking. Remove the mat with hot pads or tongs. Wash with soap and hot water. If residue is still present, use a non-abrasive scrub to remove the remaining residue. The baking will also help remove strong odors from the mat.

Source: <u>Cook's Illustrated</u> website An alternative to silicone baking mats is parchment paper which can be used at baking temperatures up to 450°F and sometimes 500°F.



White Spots on Home Canned Blueberries

Blueberries have a natural defense system on their skin to help make them resistant to mold. The skin has a high wax content.

In this picture, notice the little white rings? It looks like white bloom, similar to what happens to chocolate when it is temperature abused. Those white spots are melted wax from the blueberries that melts at a temperature of at least 140°F. When canning fresh blueberries, the wax melted, then re-solidified during cooling leaving the little white rings. Reheating should melt it again.

This is not harmful and is a natural component of the fruit.

Source: Oregon State University Master Food Preservers

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Photo: Oregon State University. This blueberry is after canning.

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## **Beware of Fraudulent Flu Products**



## Proper handwashing can help prevent the spread of flu and COVID-19.

As cold weather settles in, the threat of flu season is here which compounds COVID-19 concerns. The best defense against the flu is getting a <u>flu vaccine</u>.

There are no legal over-thecounter (OTC) drugs, approved by the <u>U.S. Food and Drug Administration</u>, to combat the flu itself. There are OTC drugs to ease the symptoms. There are also a lot of other products sold, including food products like herbal teas, that make claims to fight the flu. Some of these products are fraudulent and could mislead consumers resulting in serious harm. There are also unexpected side effects or interactions with other medications.

Some fraudulent claims to look for include:

- Reduction of flu severity or length.
- Boost immunity without a flu vaccine.
- Prevent catching the flu or other viral infections
- Support your body's natural immune defenses.

Always seek medical attention for the best treatment advice.





Karen Blakeslee, M.S.



On the Web at www.rrc.ksu.edu



### What is Syneresis?

Have you opened a carton of yogurt or sour cream and found a watery layer that separated out? Some call it "weeping," but



Yogurt with watery liquid that has separated from the yogurt.

it "weeping," but it is technically called syneresis. Simply put, the gel lets go of some of the liquid. Why does this happen?

ry liquid that im the yogurt. Structure tends to contract and looses its power to hold in water. Some gels are looser when hot, but tighten up when cooled. This can also result in water loss. Gelling ingredients, such as xanthan gum, can help control syneresis, but can also result in a stiff, rubbery final product. Ice crystals on ice cream is another form of syneresis.

So don't cry over syneresis! Shake the ketchup bottle, stir the sour cream and you'll never know it wept!

Source: Cook's Illustrated, February 2017

Reference to any specific commercial products, process, service, manufacturer, or company does not constitute its endorsement or recommendation. Paid for by Kansas State University