

Jody G. Holthaus
District Extension Agent
Livestock and Natural Resources

Dairy Month!

June is Dairy Month. I've celebrated by making two batches of homemade ice cream! National Milk Month was established in 1937 by a group of chain stores to promote drinking milk and increase demand at a time when cows were turned out to pasture, and milk production was at a peak. It ran from June 10 to July 10, with the original theme of "Keep Youthful—Drink Milk." The National Dairy Council stepped in to promote the cause in 1939, adjusted the timeframe to encompass the month of June, and renamed the event "June Dairy Month." In 1955, the American Dairy Association took over the promotion of June Dairy Month, which has developed into an annual celebration of the contributions the dairy industry has made to the world over the centuries...actually, millennia.

U.S. dairy farms produce roughly 21 billion gallons of milk annually. All 50 states in the U.S. have dairy farms. Dairy farmers are paid by the hundredweight (100 pounds), not by the gallon. There are approximately 8.6 pounds of milk per gallon. Ninety-nine percent of all U.S. households purchase milk. The average American consumes almost 25 gallons of milk each year. About 72 percent of the calcium in the U.S. food supply comes from dairy foods.

To get the amount of calcium in an 8-ounce glass of milk, you'd have to eat seven oranges or six slices of wheat bread.

The average dairy cow weighs about 1,400 lbs. Cows have 32 teeth, all of them on the bottom with a dental pad on top. Cows have an acute sense of smell and can smell something up to six miles away.

A cow eats 90–100 pounds of food and drinks about 35 gallons of water (the equivalent of a bathtub full) every day. A cow spends about 6 hours eating and 8 hours chewing its cud every day. A cow does not actually have four stomachs, but a single stomach with four compartments:

1. Rumen – The first part of the cow's stomach helps break down complex plant products like grass.
2. Reticulum – The food is then mixed with saliva to produce a cud, which the cow brings back up to her mouth to chew and break down further.
3. Omasum – Where all the water is absorbed out of the food.
4. Abomasum – Where the food is finally digested, as in a human stomach.

A cow produces an average of 6.3 gallons of milk daily. That's more than 2,300 gallons each year and 350,000 glasses of milk in a lifetime.

A dairy cow is more valuable for its milk, cheese, butter, and yogurt than for its beef.

David G. Hallauer
District Extension Agent
Crops & Soils/Horticulture

Row Crop Diseases and Fungicide Resistance

Row crop disease management can be a tricky business. Are we going to see disease? If we *do* see lesions on the leaf, is it really disease? Does my hybrid have disease tolerance? Is a fungicide necessary at this disease level? Which fungicide? When?

I shared information last week on a disease monitoring network and a resource to assist with disease identification. When used in combination with a good scouting program and knowledge of seed and fungicide products, they can help make the decision a little clearer. If a fungicide application is being considered, make sure to consider resistance management as well.

Like herbicide resistance, fungicide resistance is a big concern in the crop production industry, and with good reason considering the damage we can see from disease infestations. Help delay resistance with a few simple steps:

Apply a fungicide only when necessary. If genetics plus environment plus presence equals low disease pressure, applications might be avoidable. Consider economics, too.

If fungicides are deemed necessary, use labeled rates of products with multiple target sites. A sub-lethal dose of fungicide can actually increase resistance issues. A single site of action may well do the same.

Follow up. Revisit sprayed fields two weeks post application to determine efficacy.

For information on best management options for fungicide applications in row crop, drop me a line or check out the Crop Protection Network at www.cropprotectionnetwork.org.

Sweet Corn Earworm

There's nothing like pulling back the husks on the first ears of corn of the season...only to find a corn earworm. Grrr...

Corn earworm damage to sweet corn stands on an annual basis is a given. Moths lay eggs on developing silks at night. Eggs hatch and the larvae start at the tip of the ear, munching their way towards the base, ruining good sweet corn in the process.

If earworm free sweet corn is your goal, the peak moth flight occurs in early July, with larvae present shortly thereafter. Insecticide applications to silks can help, but require application every two to three days as silks continue to grow. They also have to be applied early – during the first two weeks of silking (drying silks aren't attractive to earworm larvae).

Product options (for homeowners) are numerous, but limited to just two active ingredients cyfluthrin or spinosad (organic). Commercial options are much greater.

If you don't mind spending a little time, consider a mineral or other light horticultural oil as an organic control option. Place the oil inside the silk end of the ear with a medicine dropper (half to three fourths of a dropper) when the tips of the silks begin to wilt and turn brown. This will coat earworms already present and likely suffocate them. Earworms that enter the ear after the mineral oil is applied will also be controlled. **WARNING:** applying oil *before* the silk has begun to brown may interfere with pollination.

Cindy Williams
Meadowlark Extension District
Food, Nutrition, Health, and Safety

Loneliness and Social Isolation...What Should We Know and What Can We Do?

2020...what will we hold onto from the year 2020? There have been life-altering changes, high stress, a global pandemic, and discussions of racial, ethnic, and political divides. Among all the chaos, many people are staying home long after stay at home orders were in place. Caution and safety are at the forefront of so many minds, yet there is a deep-rooted issue not being addressed: mental and emotional health, particularly among the many older adults who may live alone and/or face significant health risks.

Living alone and having limited social connections already heightens the risk of numerous health outcomes (e.g., anxiety, depression, cardiovascular disease, and cognitive decline), but this pandemic has heightened those risks for so many more, as we have seen age to be a major risk factor for severe complications or death due to COVID-19. As such, loneliness and social isolation are likely at an all-time high for older adults, and are issues that we must both be aware of and address.

So, what's the difference between loneliness and social isolation? Although some may think these concepts are synonymous, they actually mean different things. Loneliness is a feeling or experience that some people might have. It can occur when you don't have as much social interaction as you would like or even after a life transition—such as a divorce, death, a move, or even quarantine due to COVID-19. Loneliness is something you feel, and may be outwardly expressed through sadness, anger, withdrawal, or a variety of other outward emotions. Social isolation, though, is someone who has little contact with other people on a regular basis. Someone can feel lonely but not be socially isolated, and someone else can be socially isolated, but not feel lonely. These concepts do not always go hand-in-hand, but many times they do. These concepts are not experienced only by older adults, but there is heightened concern for this population.

According to the U.S. Department of Health and Human Services, about 28 percent of older adults in the United States live alone—that's 13.8 million older adults. This does not imply that they feel lonely or are socially isolated, but the sheer numbers indicate that older adults, particularly those who live alone, are certainly at higher risk of both. So, what can we do?

Be sure to check-in on folks in your communities, and encourage family members, neighbors, and others to do the same. As things progress to our new normal, inspire our communities to come back together and revive those meaningful connections that we had to do abruptly pause. Also, work with your community partners to re-ignite those positive social connections that help individuals, families, and communities thrive. Personally, be sure to check-in with your loved ones, neighbors, and friends at least once or twice a week; this frequency of connection has been shown to reduce the risk of loneliness and depression among older adults. Make it a priority and stick with it.

Although so much fantastic outreach has been accomplished, and is ongoing, through online/social media efforts, don't forget to reach out to our non-digital audiences. Connect with local organizations—such as Meals on Wheels, Senior Centers, and others—to send information, news and updates, helpful tips, or a simple hello.

The following resources are available:

- *Call 911 if you suspect a situation is potentially life-threatening.
- *Encourage the use of the National Suicide Prevention Lifeline: 1-800-273-TALK (1-800-273-8255)
- *To get information on mental health and locate treatment services in your area, (1-877-726-4727)
- *Check out the Kansas Ag Stress Resources website at: [kansasagstress.org](http://www.kansasagstress.org) (<http://www.kansasagstress.org>).

Stay safe, be well, and remember to connect.

Nancy Nelson
Meadowlark Extension District
Family Life

Understanding Adverse Childhood Experiences

More than three out of five youth in the United States will experience at least one adverse event during their childhood, according to a landmark study conducted by Kaiser Permanente that dates back 25 years.

In 1997, the Kaiser study introduced a concept known as Adverse Childhood Experiences (ACE) to define the connection between abuse, neglect and other household challenges and their effect on a person's health and well-being later in life.

At the time, Kaiser reported that 61% of children in 25 states studied had at least one ACE that resulted in 'toxic' stress – severe, long-lasting impacts such as family violence, parental depression, physical or emotional abuse, and others. In subsequent studies, Kaiser reported that one in six children had experienced four or more ACEs.

Kansas was not included in Kaiser's original studies, but data on behavioral risk factors for the state's youth has been collected since the 1990s.

Early childhood is the most sensitive time for brain development, or a time when the brain forms neural pathways that leads to lifetime cognitive development. It's like laying out the grid of a town according to your experiences. It's going to shape the way you view the world.

Some stress is good for children. Coping with small everyday stresses, such as having a toy taken away by another child, helps the brain learn to deal with challenges and prepares the child to handle more serious stresses.

Tolerable stresses may include dealing with the effects of a natural disaster, especially when the child receives support from a loving caregiver. In those cases, the child's stress response system returns to baseline once the adversity is removed.

But toxic stress can cause long-term negative effects. The U.S. Centers for Disease Control reports that repeated exposure to childhood adversity and the resulting toxic stress can lead to substance abuse and other unhealthy coping behaviors.

Further, the CDC said over the course of one's life, toxic stress as a child can lead to increased risk of physical injury, sexually transmitted infections, mental health problems, maternal and child health problems, teen pregnancy and a wide range of chronic diseases. The leading causes of death – cancer, diabetes, heart disease and suicide – have all been linked to ACEs.

Fortunately for those who have suffered through childhood trauma, it is possible to re-train the brain. This may be very difficult at first, because we learn about who we can trust at a very early age and if those first experiences or relationships are unstable and unpredictable, we learn we cannot rely on others.

However, social connections and support is vital to healing. There are a number of strategies and practices that people who have experienced trauma use in their journey of healing, such as mindfulness, cognitive behavior therapy, journaling and more. It is really individualized and a process or journey. There are many groups in communities across the nation that provide support, encouragement and a safe space for individuals to heal.

A 2017 study reports that family and community are among the important buffers for alleviating or preventing the effects of toxic stress.

We quickly pass judgment when we see a child or family struggling or displaying some of the signs and symptoms of toxic stress, without knowing their situation or story.

Family-level buffers include supportive relationships, family cohesion or 'sticking together,' parental relationships, stable caregiving and stable employment.

Community buffers include non-family relationships and social support; religion; community cohesion; civic engagement and economic development. We need to work on policies, systems and environmental changes, such as family-friendly work policies and changing social norms that relate to child development, child safety and discipline.