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Extension - Sullivan County

Fast Food and Depression: Are There Links?

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By Karen Ensle EdD, RDN, FAND, CFCS

Rutgers Cooperative Extension of Union County

Depression affects 121 million people worldwide and there is increasing evidence documenting the link between consuming fast food and experiencing depression. A growing body of research suggests that a diet rich in fast food, characterized by high levels of refined sugars, saturated fats, and processed ingredients, may contribute to an increased risk of developing depression. Fast food is often high in unhealthy trans fats, which have been linked to inflammation in the body. Chronic inflammation is associated with various mental health issues, including depression. Additionally, the rapid spikes and crashes in blood sugar levels that result from consuming sugary and processed foods can negatively impact mood and contribute to depressive symptoms.

Social and environmental fac-

tors also contribute to the link between fast food and depression. Consuming fast food is often associated with more of a sedentary lifestyle, which has been linked to increased rates of depression. Additionally, the social isolation that can accompany frequent fast food consumption, as opposed to shared meals with friends and family that incorporate fresh, wholesome ingredients, may contribute to feelings of loneliness and decreased mental well-being.

A study published in the Public Health Nutrition journal shows that individuals that regularly consume commercially baked goods (fairy cakes, croissants, doughnuts, etc.) and fast food (hamburgers, hotdogs and pizza) have a 51% higher likelihood of developing depression. Furthermore, the more fast-food individuals consume, the greater the risk of depression.

High refined carbohydrates can lead to blood sugar fluctuations, which can cause anxiety, trembling, confusion, and fatigue. Lack of omega 3 fatty acids can create a mental state that includes anxiety along with depression. Fast food is typically high in saturated fats, trans fats, and omega-6 fatty acids, which can trigger an inflammatory response that has links to anxiety and depression.

Consumers of fast food are 51% more likely to develop depression compared to those who eat little or none. High consumption of fast food is associated with a significantly increased risk of developing depression.

Fried foods, refined grains, sugary products, and beer were associated with higher rates of anxiety and depression. A dietary pattern characterized by a high consumption of red and processed meat, refined grains, sweets, high fat dairy products, butter, potatoes, and high fat is associated with an increased risk of depression.

Mission: We deliver practical, research-based information that enhances lives and livelihoods. Vision: We will be a leader in providing relevant, high-impact educational programs that transform the lives and livelihoods of individuals and communities in Indiana and the world.

Fast food

Continued from page 1.....

Adjusting your eating habits to include healthier options that are less processed and more whole foods can help improve your mental well-being. A dietary pattern characterized by high intakes of fruits, vegetables whole grains, fish, olive oil, low fat dairy, antioxidants and one that has low intakes of animal foods is associated with a decreased risk of depression. Studies have also shown an improvement in mood with intake of saffron, turmeric, probiotics, flaxseeds, and walnuts.

In conclusion, while the relationship between fast food consumption and depression is multifaceted, evidence suggests a noteworthy connection. Addressing this issue requires a holistic approach that considers dietary choices, nutritional intake, lifestyle factors, and the broader social and environmental factors. Encouraging healthier eating habits and raising awareness about the impact of fast

food on mental health are crucial steps towards promoting overall well-being.

Gangwisch JE, Hale L, Garcia L, et al. High glycemic index diet as a risk factor for depression: analyses from the Women's Health Initiative. Am J Clin Nutr. 2015;102:454-463. doi: 10.3945/ajcn.114.103846.

Sánchez-Villegas A, Toledo E, de Irala J, Ruiz-Canela M, Pla-Vidal J, Martínez-González MA. Fastfood and commercial baked goods consumption and the risk of depression. Public Health Nutr. 2011;15:424-432.

Tang WK, Lee JC. Association of Fast-Food Intake with Depressive and Anxiety Symptoms among Young Adults: A Pilot Study. Nutrients. 2024 Sep 30;16(19):3317. doi: 10.3390/nu16193317. PMID: 39408284; PMCID: PMC11478624.



Extension - Sullivan County

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Indiana Extension Homemakers Association Sullivan County President's Message

Sullivan County Extension Homemakers had a great year at the food stand. Thank you for all donations and volunteer time! It's great seeing everyone each year. Thanks for your patronage!

This year's Christmas Bazaar with be Tuesday, November 8 from 3 to 7 pm.

Vendor letters are being sent in early September. Any questions should contact Becky Cole at 812-239-8626.

We welcome a new Home Extension Club, Home Sweet Home Society. See their upcoming meetings below!

- Becky Cole, Sullivan County Extension Homemakers President





Tar Spot and Southern Corn Rust August Update in Indiana

By: Darcy Telenko

A number of foliar diseases have made an appearance in corn across Indiana. Southern corn rust has now been confirmed across the state it is highly possibly that pockets of southern rust can be in found in your corn fields (Figure 1A). If you haven't seen it yet I suggest getting out to look – we would love to get a few leaf samples from those counties not turned yellow on the map. In our research site up in Porter County (Wanatah, IN) we found four of the major foliar diseases northern corn leaf blight, tar spot, southern rust and gray leaf spot (top to bottom in Figure 1B).

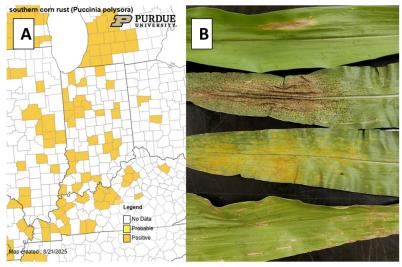


Figure 1A. August 21, 2025 map of southern rust (Puccinia polysora) and 1B. foliar disease examples of northern corn leaf blight (top leaf), tar spot, southern rust and gray leaf spot (bottom leaf) found in one of our fields.

Tar spot can be found in many fields, but due to environmental conditions has not move rapidly into the upper canopy. I suspect that will change now in the next couple of weeks (Figure 2).

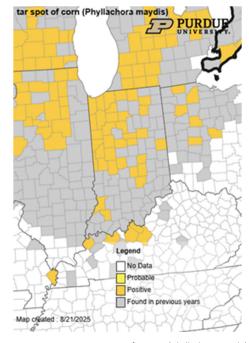


Figure 2. August 21, 2025 map of tar spot (*Phyllachora maydis*).

I know there are still some questions on if a fungicide application should be made. A fungicide application can be effective at reducing disease and protecting yield, but there are a number of factors that need to consider. Here are my thoughts on what to consider.

- 1. Amount of disease present in the field what diseases do you find? Where are they in the canopy and how widespread?
- 2. What is the growth stage? if the corn is at dent then no fungicide is necessary (see Figures 3 and 4)
- 3. If there's over 5% disease at the ear leaf let it go as you won't slow the disease down at this point.
- 4. Current weather conditions (use the forecasting tools https://cropprotectionnetwork.org/crop-disease-forecasting)
- 5. The value of the crop and cost of fungicide application.

Figures 3 and 4 are handy tables to assist in making a fungicide decision based on our university data.

Crop Stage When Tar Spot is First Detected	Possible Benefit From Spraying	Comment	
Late Vegetative	Rarely, consult extension specialists before spraying	Scout fields and monitor disease progress; may need a second spray	
VT/R1 (Tasseling/Silking)	Yes	May need a second spray	
R2 (blister)	Yes	Less likely to need a second spray	
R3 (milk)	Yes	No second spray needed	
R4 (dough)	Maybe, with severe disease pressure	No second spray needed	
R5 (dent)	No	No second spray needed	
R6 (black layer)	No		

Figure 3. A decision table for tar spot outlining possible benefits from applying fungicides based on when disease is first detected in a field and crop growth stage. Source: Crop Protection Network https://cropprotectionnetwork.org/maps/tar-spot-of-corn

Crop Stage When Southern Rust is First Detected	Possible Benefit from Spraying	Comment
Vegetative	Not likely to find southern rust at this stage unless corn is planted very late for the region	Scout fields for disease
VT (tasseling)	Yes	May need a second spray
R1 (silking)	Yes	May need a second spray
R2 (blister)	Yes	Less likely to need a second spray
R3 (milk)	Yes	No second spray needed
R4 (dough)	Maybe, with severe disease pressure	No second spray needed
R5 (dent)	Unlikely	No second spray needed
R6 (black layer)	No	

Figure 4. A decision table for southern rust outlining possible benefits from applying fungicides based on when disease is first detected in a field and crop growth stage. Source: Crop Protection Network https://cropprotectionnetwork.org/maps/southern-corn-rust

We are still documenting tar spot and southern rust as it is important to understand the disease distribution and severity across Indiana. All sample costs will continue to be covered for both these diseases and any others you might find in your corn or soybean fields. It is extremely important to know if this disease is present in your fields to implement disease management tools if necessary.

If you observe tar spot or southern rust in a county that has not reported this season or would like to share what you have been seeing on your farm, then please send a sample to the Purdue Plant Pest Diagnostic Lab (PPDL) https://ag.purdue.edu/btny/ppdl/Pages/Submit-A-Sample.aspx or contact me for further information (dtelenko@purdue.edu).

Help Us Track Diseases in Corn and Soybean - Free for Indiana Growers Send samples to Purdue Plant Pest Diagnostic Lab

https://ag.purdue.edu/department/btny/ppdl/submit-samples/physical-submission.html

We are looking to track all corn and soybean diseases in Indiana - tar spot, southern rust, frogeye, red crown rot, and others.

Checkoff funding from Indiana Corn Marketing Council and Indiana Soybean Alliance has





Issue: 25-12

THE PURDUE August 22, 2025 LANDSCAPE REPORT

Fall Pruning and Planting for Indiana Gardens

Bv: Karen Mitchell, mitcheka@purdue.edu

Fall is quickly approaching, bringing cooler temperatures, refreshing rains, and fewer pests. It's a perfect time to tackle garden tasks, from pruning perennials to planting vegetables.

Pruning

Fall is a good time to prune out dead, damaged, or diseased plant material (Fig. 1). You can also tidy up perennials that have finished blooming and make light shaping cuts on shrubs. Consider saving some stems when cutting back the spent blooms of herbaceous perennials. When left standing, these stems provide habitat for pollinators and food for wildlife while also adding winter interest to a garden that may otherwise remain empty for the cold months ahead (Fig.2).



Figure 1. The highbush cranberry (Viburnum opulus) provides year-round interest with ornate flowers, bright berries, and vibrant fall foliage. These spring-blooming shrubs are best pruned after flowering, but damaged or diseased branches can be pruned out at any time.



Figure 2. When left standing, the spent blooms of purple coneflower (Echinacea purpurea) provide habitat and food for wildlife while adding winter interest.

Do not prune spring-blooming shrubs such as lilacs, forsythia, or spicebush in the fall, otherwise you'll cut off next year's flower buds. The bigleaf and oakleaf hydrangea also produce blooms on old wood (Fig. 3). These are best pruned immediately after flowering. Always use sharp, clean tools and cut just above a bud or branch junction at a slight angle. For pruning best practices along with a comprehensive list of recommended pruning times for common woody perennials, refer to Pruning Ornamental Trees and Shrubs.



Figure 3. The 'Ruby Slippers' oakleaf hydrangea (Hydrangea quercifolia) should be pruned after flowering to remove spent blooms, maintain shape, or reduce the overall size. However, as seen here, spent blooms may be left for continued interest.

Planting

Fall is prime time to plant hardy perennials, trees, and shrubs. The soil remains warm long after the air temperature drops, giving roots time to establish before the ground freezes. Aim to finish planting by mid-to-late October in most parts of Indiana. Consider natives such as purple coneflower (Fig. 4), serviceberry, or buttonbush for low-maintenance beauty. Visit the Indiana Native Plant Society's Native Plant Finder to explore other native options for your landscape.



Figure 4. Purple coneflower (Echinacea purpurea) has a long bloom period starting in June and extending into September or October. The vibrant blooms also provide food for a wide range of pollinators.

It's also the season for planting bulbs for spring blooms and

vegetables for a fall harvest. Tulips, daffodils, and crocus should be planted before the soil freezes to provide a burst of early spring color. You can also sow quick-growing cool-season vegetables like leaf lettuce, spinach, and radishes for a fall harvest (Fig. 5). Check out The Fall Vegetable Garden for a planting guide on cool-season vegetables.



Figure 5. The cooler conditions in fall are ideal for cool-season crops like spinach, which prefer temperatures between 50°F and 60°F.

Prep for Winter Protection & Spring Success

Trees, shrubs, and perennials should continue to be irrigated deeply up until the ground freezes. Add a layer of mulch after the soil cools to insulate roots from harsh temperature swings. Be sure to keep mulch a few inches away from tree trunks or shrub stems to prevent rot or rodent damage (Fig. 6). Winterize Your Trees offers more tips on protecting your perennials from the often frigid and dry conditions of an Indiana winter.



Figure 6. Adding a layer of mulch around trees and shrubs insulate the roots from harsh temperatures and help to retain moisture. However, avoid piling mulch against the trunk. Volcano mulching, as seen here, causes problems such as rot and provides shelter for rodents as they chew on the trunk.

Referenced resources

Pruning Ornamental Trees and Shrubs - Purdue Extension HO-4-W

Continued from previous page

https://www.extension.purdue.edu/extmedia/HO/HO-4-W.pdf

Indiana Native Plant Society's - Native Plant Finder https://finder.indiananativeplants.org/ The Fall Vegetable Garden - Purdue Extension HO-66-W https://www.extension.purdue.edu/extmedia/HO/HO-66-W.pdf

Winterize Your Trees - Purdue Extension FNR-484-W

https://www.extension.purdue.edu/extmedia/fnr/fnr-484-w.pdf

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Fall 2025 Course



10 Classes
16 Naturalist Topics
Hands on Learning
Graduate as a Master Naturalist
All for \$25!

Grow Mushrooms, Wildlife ID, Water Game, Entomology, Goose Pond FWA, Invasives v Natives, Soil Health, Aquifers, & More!

For More Information Contact:





Extension - Sullivan County

bldraper@purdue.edu 812-268-4332

Purdue University is an Equal Opportunity/Equal Access University. If you are in need of accommodations to attend this program, please contact Bailey Draper prior to the meeting at bldraper@purdue.edu or 812-268-4332 by September 22nd.



SCPL YOUTH DEPARTMENT SEPTEMBER 2025







Clover Monthly ** September 2025

Sullivan County 4-H monthly communication for 4-H members, families, leaders, fair board, and council.

Upcoming Events:

- Corn Festival Parade—September 20, arrive 12:45 p.m.
- National 4-H Week

 October 5-11
- Achievement program –November 2, 2 p.m.

A BIG Sullivan County 4-H Fair 2025 Thank You!

A big thank you to the fair board, 4-H Council, adult club leaders, project superintendents, and all volunteers for the long hours and hard work put into helping make the 2025 fair a success! 4-H provides real-life educational opportunities that develop young people who will have a positive impact in their communities and the world. Many examples of that were witnessed in July! Congratulations to all 461 4-Hers and 136 Mini 4-Hers who completed projects this year!

Farm Bureau Tenure Award

The Farm Bureau 4-H Tenure Award is an award given to recognize the top two 4-H members in each county that complete the most projects throughout their 4-H experience.

Pictured: 2025 Tenure Award winners Autumn Fulk and Tanner Cloutier. They are both members of the Curry Nomads 4-H Club.



Congratulations!

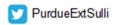
Send Thank You Notes

It's important for all 4-Hers to send thank you notes to those who helped make their 4-H projects and experiences possible. Please do this as soon as possible. Contact the Extension office if you need addresses or other assistance at 812-268-4332 or sullivances@purdue.edu.

County and State Fair Pictures

We are so proud of the hard work and dedication our Sullivan County 4-H'ers have shown at both the County Fair and the State Fair! We'd love to see your favorite fair memories—please share your photos with us at sullivances@purdue.edu. Your snapshots will help us highlight and celebrate their success!







You can represent Sullivan County 4-H in the Corn Festival Parade!

4-H in Corn Festival Parade

We will be walking in the Corn Festival Parade on September 20 starting at 1:00 pm. Meet in the parade line up in the north parking lot at Sullivan High School in front of the Student Activity Building (SAC) by 12:45 pm. Wear your favorite 4-H t-shirt, bring some candy to throw and join us! We will be handing out candy and information on joining 4-H. 4-H members, Mini 4-H members, adult volunteers, and parents are welcome to walk with us.

4-H Enrollment for 2025-2026 program year opens in early October!

The 4-H program year runs from October 1 to September 30.

Starting in early October, parents can go into 4HOnline (https://v2.4honline.com) to enroll/reenroll their children in 4-H for 2026 fair.

Grades as of January 1, 2026 for participants in 4-H.

- Mini 4-H is Kindergarten through 2nd grades.
- Regular 4-H is 3rd-12th grade.
- Junior Leaders is for youth in 7th-12th grade.

Cost to participate in 4-H:

- Mini 4-H is free.
- Regular 4-H cost is \$15. Please pay online or cash or check at the Extension Office.

Checks payable to: Purdue University.

If you need assistance, please contact the Extension office.

Achievement Awards Update

Sullivan County 4-H Achievement Awards 2025 have been selected by 4-H project superintendents, adult club leaders, and 4-H Council members. Members will not apply for these awards as in past years. Volunteers selected winners for these awards during the fair.

<u>Short essays are now being accepted from 4-Hers for the following three awards:</u> Achievement award, Citizenship award, and National Leadership (I Dare You) award.

- Essays should be 1-3 paragraphs answering why the 4-Her deserves to be selected for the achievement award, the citizenship award or the National Leadership award.
- Members may apply for one, two or all three of these awards.
- Deadline for applying for (submitting essays) for these three awards is Sept. 30 by 4 p.m.
- Please do not email. Drop off applications at the Extension office or the drop box across the street from the office.

The Achievement Awards program will be Nov. 2, 2025, in the 4-H Building at 2 p.m. Invitations will be mailed to those who will receive an award. For more information, contact the Extension office at 812-268-4332.

10-Year Highlights

Going into the 2025-2026 4-H Year we would love to highlight Sullivan County 10 Year 4-H Members! Contact the Extension office for details.

4-H Adult Volunteers — Heads up for October

October starts enrollment or re-enrollment in 4H Online for all 4-H adult volunteers.

The online training will take about 30 minutes to complete. Go to v2.4honline.com to complete the annual training.

Instructions are on our website: www.extension.purdue.edu/sullivan. From the home page, scroll down and click on the "4-H Information" link, then scroll down to the "NEW Adult Volunteer" or "Returning Adult Volunteer" links.

The application process for new volunteers is all online now, including the applications and listing references.

If you have questions or need computer access, don't hesitate to contact the Extension office at 812-268-4332. We look forward to helping you complete everything starting October 1.

4-H Council Committee Members Wanted

We are in search for Adult Volunteer 4-H Council committee members. These committee members do not have to be 4-H Council members (as it has been in the past). Committees will meet outside of Council meetings and report out their work and make recommendations at council meetings.

Current 4-H Council Committees are:

Budget & Audit Projects

Trips & Awards Club Leaders

Nominating Constitution & By-Laws

Please reach out to Extension Educator Cheryl Casselman or a 4-H Council member if interested or for more information.

Mineral Tubs

We have several empty mineral tubs up for grabs in the poultry barn that have been donated to 4-H families who are interested!

First come, first served — just stop by the barn to get what you want! These could be used for goat playgrounds, outdoor feed/water containers, raised garden beds, compost bins, sandboxes, storage, and so many more neat ideas!



Post-Fair Survey

Missed the post-fair meeting but have feedback? Feel free to fill out the post-fair survey!

 $https://purdue.ca1.qualtrics.com/jfe/form/SV_6KDvof1eVBlW3hY?\\ fbclid=IwY2xjawMj1XpleHRuA2FlbQIxMABicmlkETF4Um83SVFHb2U4elNzcndSAR4eQ-V-AW3HdT6ttessTobdWj1lmdPXrWDemGn63tqSS7z081E_rJ1jjHgJFw_aem_iAZ3-B2pAG6mnURoeb4YjQ$





2025 Sullivan County 4-H Fun Facts

People

4-H Members: 461

Mini 4-H Members: 136

10-year 4-H Members: 22

Adult Volunteers: 144

Fair Board Members: 9

4-H Council Members: 30

Extension Board Members: 12

Project Superintendents: 35

Club Leaders: 20

Project Judges: 84

Famous Farm Bureau milkshakes

It was an amazing year for Farm Bureau milkshake sales at the 2025 Sullivan County 4-H Fair with a grand total of 11,712 for the 10 days.

Thank you to Sullivan County Farm Bureau members and board members for selling your famous milkshakes!

Thank you to everyone who purchased milkshakes!

The proceeds from milkshake sales goes to Sullivan County 4-H.

We can't wait until next year!

Projects

Total Project Entries: 2,172

Total Static Project Entries: 945

Total Livestock Project Entries:

1,227

Ribbons Awarded

Grand Champion: 86

Reserve Grand Champion:72

Champion: 269

Reserve Champion: 198

Selected for State Fair: 135

Honor Exhibit: 134

First Premium: 2,059

Second Premium: 94