

Chesapeake Bay Watershed

**N.E.W.S. Station**

Outdoor Report

Nature Education Wellness Stewardship



yieldcamp

WELLNESS. THROUGH. SERVICE.

**November is**

**National Adoption Month**

**Trauma, Depression, Digestion  
and Disease: the connection between  
gut health and brain health.**

*And is fasting and praying the cure?*

**December is**

**Seasonal Affective Disorder (SAD)  
Awareness Month**

**SUICIDE PREVENTION:**

**Send text to 988 Or call - 1 (800) 273 - 8255**

Substance Abuse and Mental Health Services Administration

*call SAMHSA @ 1 (800) 662 - 4357*

**Crisis hotline – text HOME to 741741**



## Adoption Process and Its Benefits

✓ Exclusively available on IvyPanda

The world is currently home to about seven billion people. A significant portion of this number comprises orphans, children from street families and those from disadvantaged backgrounds. At the same time, millions of unplanned pregnancies occur across the world every year. Most of the children who are born from such pregnancies together with all categories of vulnerable children are potential beneficiaries of adoption. Meanwhile, there are thousands of people seeking to take in a child as their own all over the world. In America, research indicates that six out of every ten people have had a personal experience with adoption (Gebhardt 423).

Thus, adoption is important because it gives children from disadvantaged backgrounds a chance to live normal lives while simultaneously helping infertile couples to become parents. Unfortunately, the legislations governing abortion are quite specific about who can adopt and who cannot. They, in effect, deter many people from adopting children, yet some of them could make good adoptive parents.

Whereas some of these restrictions seek to ensure that adopted children move to better conditions, they do not serve the intended purpose all the time (Moye and Rinker 375). Adoption should not be based upon, whether the adopting family is black, white, green, purple, or whichever race there is. Rather, it should be based on an objective evaluation of each individual's or family's ability to give the adopted child a good life.

The race, ethnicity, sexual orientation, or even religion should not have any effect on the family a child is placed with because it is not plausible to rigidly assume that these characteristics define people. For example, while it is true that the average annual income of white families is higher than that of black families, it is not sensible to use this disparity as basis to conclude that black families do not have the financial capacity to adopt.

### OPEN ADOPTION

All types of contact are shared to include in-person visits. The birth parents typically maintain a relationship with the adoptive family and the adopted child post-placement.

Adoption  Choices  
of TEXAS

### SEMI-OPEN ADOPTION

Little if any identifying information is available is exchanged. Contact through the adoption process and post-placement is minimal.

### CLOSED ADOPTION

No identifying information is shared between birth parents and adoptive families. Birth mother chooses not to have a relationship with family nor child post-placement.



# Chesapeake Bay Watershed N.E.W.S. Station Outdoor Report



CHESAPEAKE BAY FOUNDATION  
*Saving a National Treasure*

## The Chesapeake Bay Watershed

The Bay and the rivers and streams that feed it make up an impressive watershed, which:

- supports more than 18 million people who live, work, and play within the watershed (10 million of these live along or near the Bay's shores);
- covers 64,000 square miles;
- includes parts of six states (Virginia, Maryland, Delaware, West Virginia, Pennsylvania, New York) and Washington, D.C.;
- has 11,684 miles of shoreline, including tidal wetlands and islands (that's more shoreline than the entire West Coast of the United States);
- contains more than 100,000 rivers and streams;
- has a 14:1 land-to-water ratio;
- helps filter and protect the drinking water of 75 percent of Bay watershed residents through its forests and trees.



**Chesapeake Bay**

The Chesapeake Bay is the largest estuary in the United States. It runs north-south from the mouth of the Susquehanna River to the Atlantic Ocean. It is one of the most productive estuaries in the world, with over 3,600 species of animals and plants. The bay provides vitally important habitats for wildlife, lots of recreational opportunities for people, and is an important fishery upon which both people and wildlife depend.

# Chesapeake Bay Watershed N.E.W.S. Station Outdoor Report

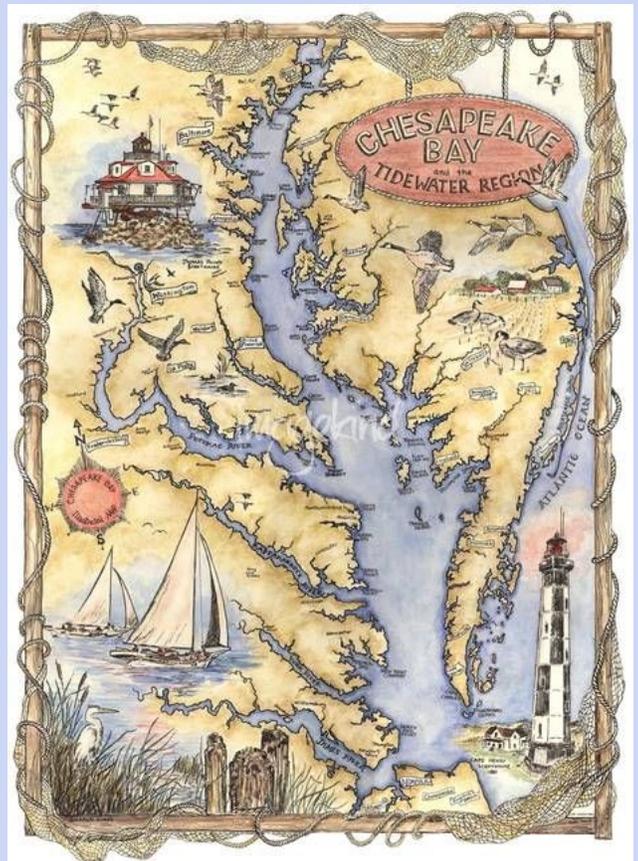


## The Chesapeake Bay

- was formed nearly 12,000 years ago when glaciers melted and flooded the Susquehanna River valley; it is essentially the tidal portion of the Susquehanna—two integral parts of one ecosystem;
- is—most historians believe—named after the Algonquin word chesepiooc, meaning "great shellfish bay;"
- is approximately 200 miles long, stretching from Havre de Grace, Maryland, to Norfolk, Virginia;
- has an average depth of 21 feet (the deepest part of the Bay, a.k.a. "The Hole," is 174 feet deep and located off of Bloody Point, southeast of Annapolis, Maryland;
- ranges from 3.4 to 35 miles wide;



CHESAPEAKE BAY FOUNDATION  
Saving a National Treasure



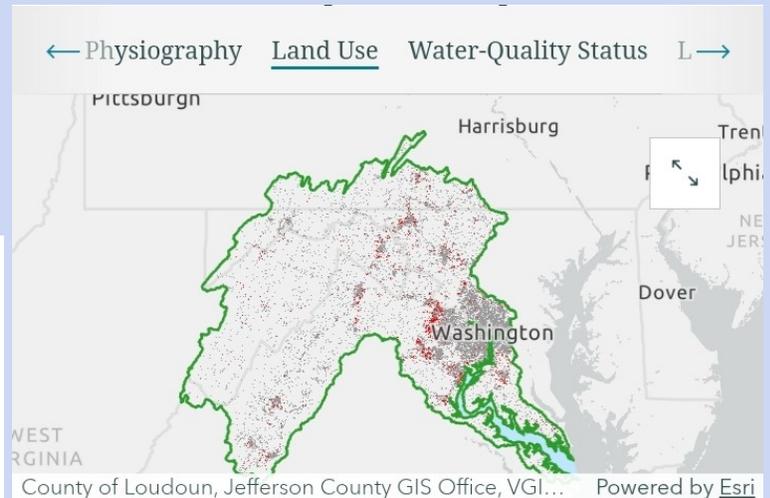
# Chesapeake Bay Watershed N.E.W.S. Station Outdoor Report



"Analysis of recent tidal and nontidal data show lower amounts of nitrogen, phosphorus and sediment entering the Chesapeake from its 64,000-square-mile watershed, although Bay water quality remains relatively unchanged from the previous assessment period.

The Chesapeake Bay Program estimates the water quality of the Bay through four indicators:

- **Water quality standards attainment** for dissolved oxygen, water clarity (measured by **underwater grass abundance**) and **chlorophyll *a*** (a measure of algae growth).
- Monitored and modeled amounts of nitrogen, phosphorus and sediment entering the Chesapeake Bay.
- Monitored nitrogen, phosphorus and sediment trends in the watershed.
- Progress toward the **Chesapeake Bay Total Maximum Daily Load** (Bay TMDL), measured by combining monitoring and modeled data to estimate the progress of nitrogen and phosphorus reductions in response to implemented **best management practices**. . ."



## Land Use

In general, developed lands in 2001 were more concentrated within towns and major metropolitan areas. Since 2001, developed and semi-developed lands have expanded around these urban areas, as well as extending into previously undeveloped regions. This is demonstrated in the map on the right which uses impervious surface coverage to represent developed lands.

The gray area shows where the land was covered by impervious surfaces in 2001, whereas the red area shows impervious surfaces developed between 2002 and 2019. The proportion of land in the Potomac watershed classified as urban rose from 10% in 1985 to 17% in 2022 as identified in the Chesapeake Assessment Scenario Tool (CAST).

# Chesapeake Bay Watershed N.E.W.S. Station Outdoor Report

## Your Brain on Awe and Moments of Wonder

We reshape the brain when we lose ourselves in nature, art, or meditation.

Posted August 27, 2025

✓ Reviewed by Lybi Ma



### KEY POINTS

- A brain scan study explored how art, nature, and meditation affect the mind.
- Nature calmed stress circuits while sharpening visual processing.
- Moments of awe may help the brain reset, offering new ways to support mental health.

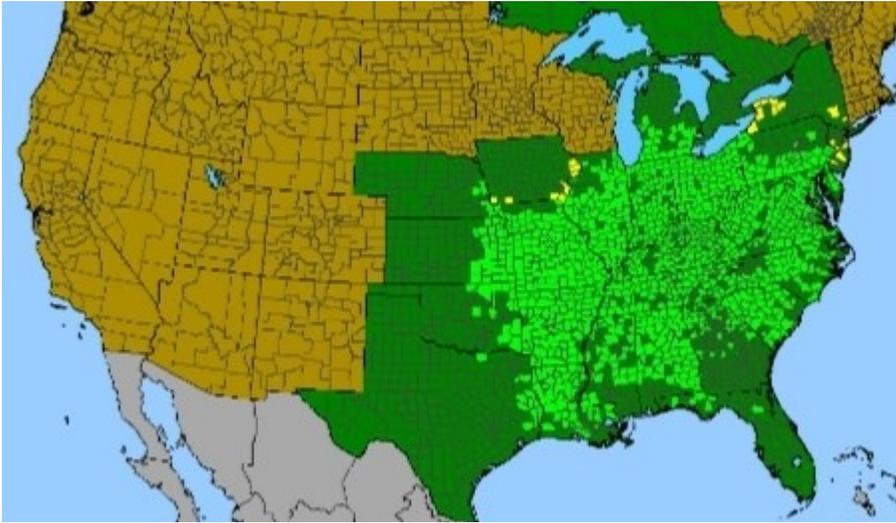


## The Brain in Conversation with the Infinite

There are moments when the world seems to fall away: the hush of a forest after rain, the sweep of a symphony, the infinite sprawl of stars overhead. Poets call it awe. Mystics call it transcendence. Neuroscience, at last, is beginning to map what happens in the brain.



# ALL ABOUT PAWPAWS



Pawpaws are not sold in stores primarily because of **their very short shelf life**, as they bruise easily and only stay fresh for a few days after ripening. They also lack a consistent ripening process after being picked, which makes them difficult to transport and store commercially, unlike other fruits like bananas that can ripen off the tree. [🔗](#)

## Reasons for limited store availability

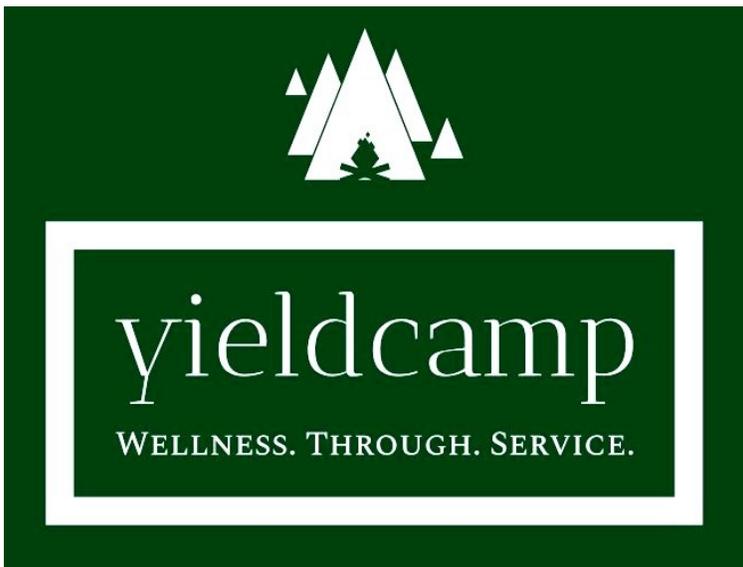
- **Short shelf life:** Once ripe, pawpaws only last for about 3-5 days on the counter before becoming squishy and brown. Refrigeration extends this slightly, but they are still highly perishable. [🔗](#)
- **Difficult to harvest and transport:** Pawpaws have delicate skin and bruise very easily, making them fragile and susceptible to damage during shipping. They must also be picked when they are already ripe and ready to eat, which makes them a poor candidate for the long supply chains of commercial stores. [🔗](#)



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# SUPPORT OUR VISION



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# King's Hairstreak



## Rare, Threatened and Endangered Animal Fact Sheet

King's Hairstreak ((*Satyrium kingi*))

Photograph by Harold L. Wierenga

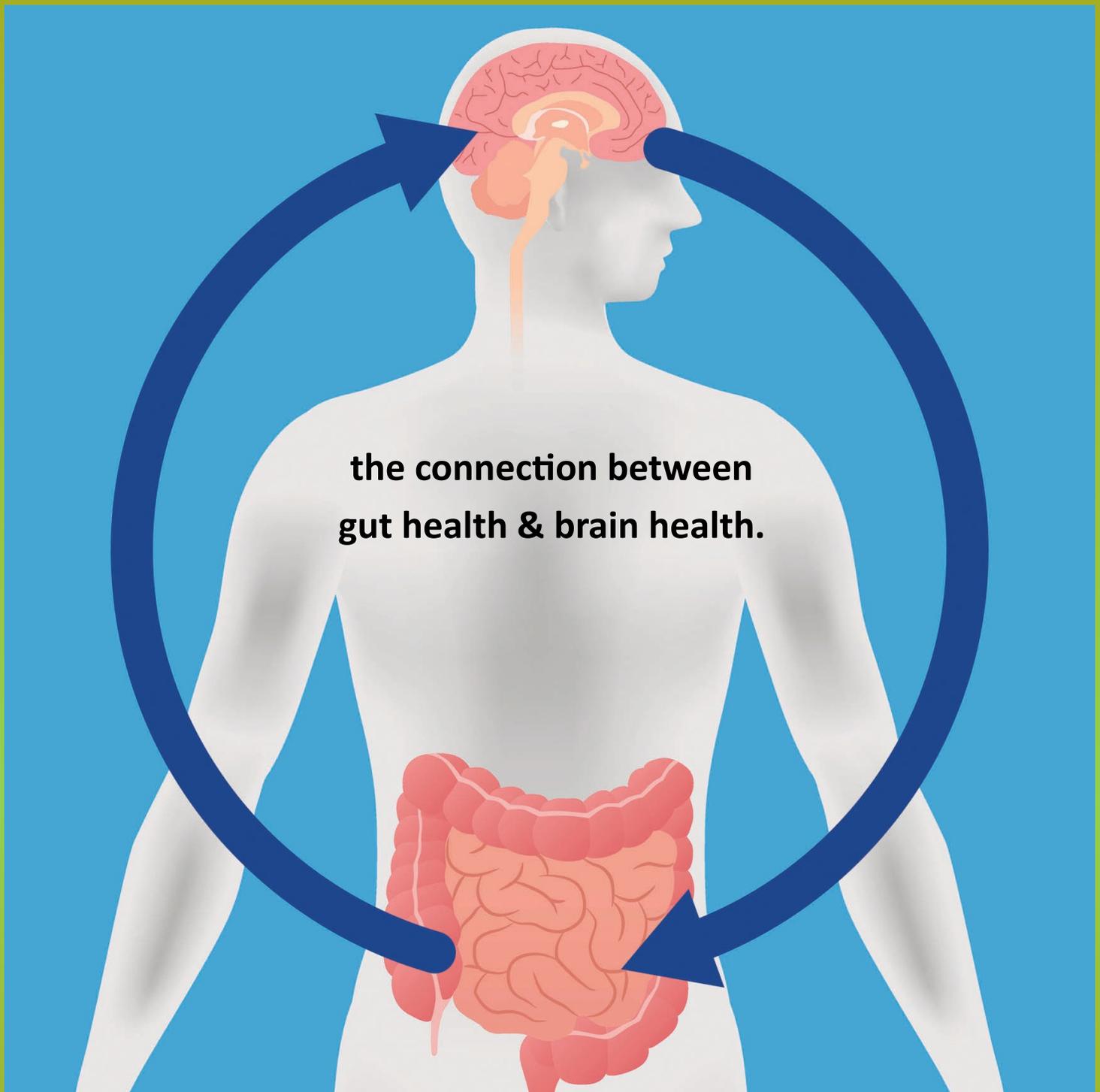
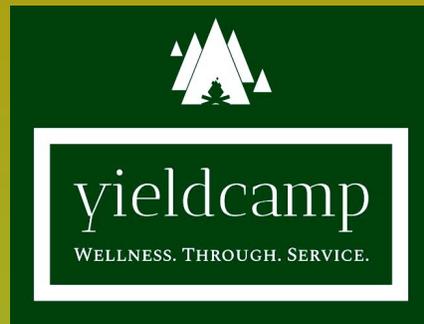
In Maryland, the King's Hairstreak may be found on the lower Eastern Shore, in wet woods and swamps. It's only larval host plant is the Common Sweetleaf (*Symplocos tinctoria*), not so common in Maryland, in fact considered rare to uncommon. This plant is where the adults lay their eggs and caterpillars feed until ready to metamorphose into butterflies. Adults may be seen flying in late spring and early summer.

Maryland's endangered



There are only four known occurrences of the King's Hairstreak in Maryland. It is difficult to determine any one cause for this species' Endangered status. The King's Hairstreak tends to live in small isolated populations from Texas to Maryland and Delaware along the Atlantic coastal plain and Gulf coast. It has an extremely limited larval food source and is vulnerable to sprays used to combat gypsy moth infestation.

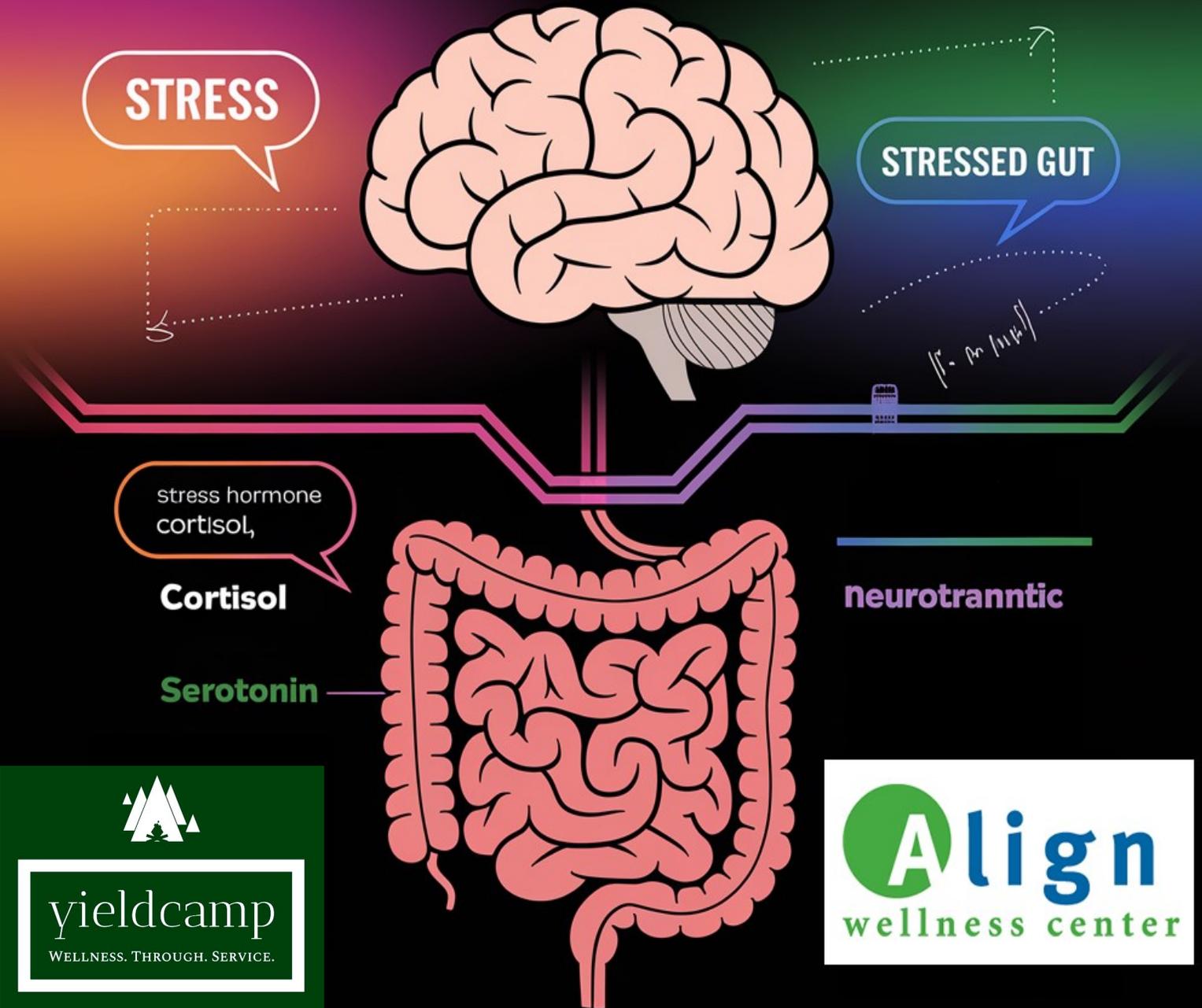
# Trauma, Depression, Digestion and Disease



Trauma, Depression, Digestion and Disease

# THE GUT-BRAIN AXIS

## HOW STRESS AFFECTS GUT HEALTH AND MOOD



## THE LINK BETWEEN GUT HEALTH AND MENTAL HEALTH

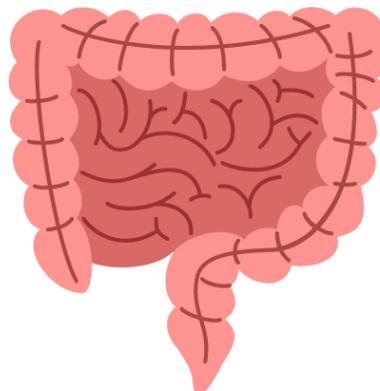
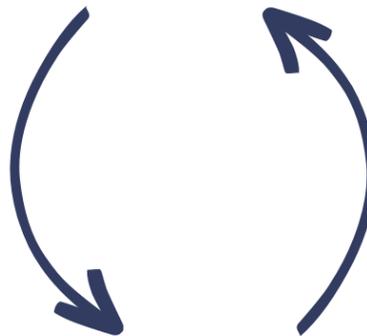
### What is the gut-brain axis?

It is the bidirectional communication route between the brain and the gut.

#### BRAIN TO GUT

Mental health conditions such as stress, anxiety and depression have physiological consequences.

It can alter gut function and motility. This can result in symptoms such as bloating, constipation and stomach pain.



#### GUT TO BRAIN

The 'second brain' (enteric nervous system) in the gut produces serotonin and other chemicals that affect how the brain works.

These chemicals can affect mental health conditions such as stress, anxiety and depression. In some cases it can also alter personal characteristics.

# Trauma, Depression, Digestion and Disease

Yes, trauma can affect pooping through a "gut-brain axis" that links psychological stress to bowel dysfunction. This can manifest as constipation, diarrhea, abdominal pain, or other symptoms associated with conditions like Irritable Bowel Syndrome (IBS), and can be linked to both current stress and early life experiences. [🔗](#)

## How trauma impacts the gut

- **The "second brain":** The gut has its own nervous system, the enteric nervous system, which can be heavily influenced by the brain.
- **Fight-or-flight response:** When stressed, the brain triggers the "flight-or-flight" response, which can slow down digestion and cause constipation, or, paradoxically, increase motor function in the large intestine, leading to diarrhea.
- **Altered nerve pathways:** Trauma can sensitize the brain and gut, making them more vulnerable to stress, which can then over-activate the nerves connecting them and lead to altered bowel habits.
- **Hormonal and chemical changes:** Stress also releases hormones and chemicals like corticotropin-releasing factor (CRF), which can directly affect the bowel and lead to dysfunction. [🔗](#)

# Trauma, Depression, Digestion and Disease

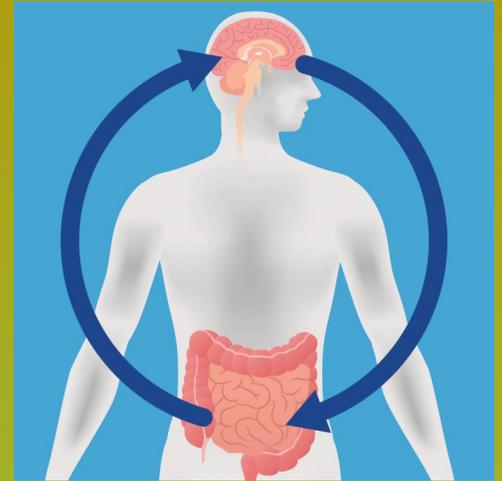
Yes, digestive issues can cause diseases, ranging from mild to severe conditions like cancer, inflammatory bowel disease (IBD), and liver disease. These problems can also lead to complications such as internal bleeding, malnutrition, chronic pain, and infections if left untreated. [↗](#)

## How digestive issues lead to disease

- **Inflammation:** Chronic inflammation in the digestive tract is a hallmark of conditions like IBD, which includes Crohn's disease and ulcerative colitis.
- **Infection:** A bacterial infection, such as *Helicobacter pylori*, can cause gastric ulcers. Some digestive issues, like diverticulitis, can lead to an abscess formation, while chronic diarrhea can increase the risk of infection.
- **Organ damage:** Persistent inflammation, like that seen in chronic pancreatitis, can damage the pancreas. Similarly, untreated peptic ulcers can lead to internal bleeding and anemia.
- **Malabsorption and malnutrition:** When the digestive system can't properly absorb nutrients, it can lead to malnutrition and other issues. For example, celiac disease prevents the body from absorbing nutrients when gluten is consumed.

# Trauma, Depression, Digestion and Disease

## How fasting and praying can improve gut and brain health



### Gut health

- **Reduces inflammation:** Fasting can help lower C-reactive protein, a marker of inflammation, and may lead to a reduction in overall inflammation in the body, including the gut.
- **Improves gut microbiome:** Some studies show that intermittent fasting can increase the diversity of gut bacteria and the levels of beneficial bacteria like *Lachnospiraceae* and *Prevotellaceae*, which are linked to better metabolic and mental health.
- **Strengthens gut barrier:** The natural fasting period during sleep allows gut lining cells to be repaired. Lengthening this fasting time may help strengthen the gut barrier, which can limit chronic inflammation.
- **Promotes cellular repair:** Extended fasts can trigger cellular repair processes, such as autophagy, which helps clear out old cells and can allow the gut lining to rebuild itself. [🔗](#)

### Brain health

- **Increases beneficial brain compounds:** Fasting may increase levels of brain-derived neurotrophic factor (BDNF), which can lead to improved cognitive function, learning, and memory.
- **Reduces brain inflammation:** Just as in the body, fasting can help decrease inflammation in the brain.
- **Enhances cognitive function:** Some people who fast report clearer thinking and a sharpened mind, which can benefit the brain-gut connection. [🔗](#)

### Praying

- **Spiritual and mental benefits:** Praying is a spiritual discipline that can lead to benefits like improved patience, gratitude, and a sense of peace.
- **Mental well-being:** These mental and spiritual benefits can contribute to overall well-being and may positively impact the brain-gut axis, as mental state affects digestive health. [🔗](#)



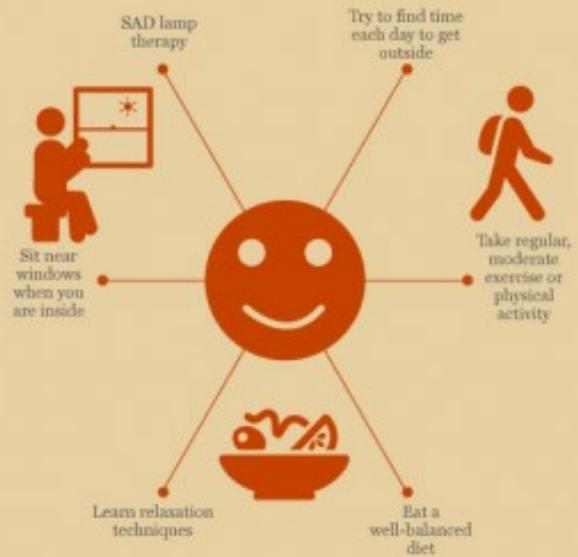
## SYMPTOMS OF SAD

Individual experiences with SAD vary, but there are a few symptoms you can look out for if you are feeling blue:



## TREATMENTS OF SAD

If you are experiencing SAD, or a case of the winter blues, consult with your doctor about the following treatments:



# Seasonal Affective Disorder (SAD): More Than the Winter Blues

As the days get shorter and there is less daylight, you may start to feel sad. While many people experience the “winter blues,” some people may have a type of depression called seasonal affective disorder (SAD).

The first step is to determine how much your symptoms interfere with your daily life.

**Do you have mild symptoms that have lasted less than 2 weeks?**



- Feeling down but still able to take care of yourself and others
- Having some trouble sleeping
- Having less energy than usual but still able to do your job, schoolwork, or housework

**These activities can make you feel better:**



- Doing something you enjoy
- Going outside in the sunlight
- Spending time with family and friends
- Eating healthy and avoiding foods with lots of sugar

**If these activities do not help or your symptoms are getting worse, talk to a health care provider.**

**Do you have more severe symptoms that have lasted more than 2 weeks?**



- Social withdrawal
- Oversleeping
- Gaining weight
- Craving foods with lots of sugar like cakes, candies, and cookies

**Seek professional help:**



- Light therapy
- Psychotherapy (talk therapy)
- Medications
- Vitamin D supplements

For help finding treatment, visit [nimh.nih.gov/findhelp](https://www.nimh.nih.gov/findhelp).

If you or someone you know is in immediate distress or is thinking about hurting themselves, call or text the **988 Suicide & Crisis Lifeline** at 988 or chat at [988lifeline.org](https://www.988lifeline.org).



**NIH** National Institute of Mental Health

[nimh.nih.gov/sad](https://www.nimh.nih.gov/sad)

# Seasonal Affective Disorder (SAD) Awareness



Fatigue or low energy levels



Feelings of depression



Changes in appetite or weight

## SYMPTOMS OF **SEASONAL AFFECTIVE DISORDER**



Social withdrawal or isolation



Irritability or agitation



Difficulty concentrating

# Seasonal Affective Disorder (SAD) Awareness

## Seasonal Affective Disorder

### What you need to know about seasonal depression

Most people who struggle with SAD notice their symptoms begin in the fall and last through winter.

Approximately 5% of the population struggles with seasonal depression.

It is more prevalent in women (4 out of 5 people with SAD are women).

5%

### Symptoms of SAD

- Frequently having trouble sleeping
- Feelings of sluggishness or agitation
- Difficulty concentrating at school or work
- Loss of interest in activities you once enjoyed
- Persistent changes in your appetite or weight
- Frequently having low energy
- Thoughts of death or suicide

Not everyone struggling with SAD will experience symptoms at once. You do not need to experience every symptom before deciding it's time to seek help.

# Seasonal Affective Disorder (SAD) Awareness

## How can you prevent seasonal depression?



### **Spend Time Outdoors Each Day**

Regular time outdoors with direct sunlight exposure can help boost vitamin D and serotonin levels.



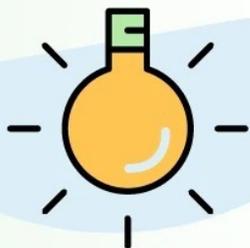
### **Eat a Healthy Diet**

Limit processed food, sugar, and alcohol while incorporating nutrient-dense foods to improve your brain chemistry and increase energy levels.



### **Exercise Regularly**

Exercise at least a few times per week to produce endorphins. These are feel-good chemical messengers that help to improve your mood.



### **Start Phototherapy Early**

Phototherapy involves a special device (sometimes referred to as a light box) that exposes you to bright light and is meant to mimic natural light from the sun.



### **Socialize with Friends**

Spending time with friends and loved ones can produce endorphins and reduce feelings of stress, sadness, and anxiety.



### **Consult Your Therapist**

If you tend to experience a shift in your mental health along with seasonal changes, get in front of it by talking to a therapist early.

# Outdoor Exploration and Adventure BEST PRACTICES and SAFETY

## NATURE NEWBIE CHECKLIST



1. Never step ON anything that you can step OVER.
2. When looking under logs, roll them towards you, not away.
3. Add water, bug spray and a whistle to your first aid kit.
4. Make sure your cell phone is fully charged.
5. Make sure someone knows where you are and for how long.
6. Remove ear buds and be aware of your surroundings.
7. Where possible, use maps when hiking in a new area.

## EASY WAYS TO CONNECT TO NATURE

- *Take a walk* in your neighborhood. Believe it or not, when you step outside you are in nature.
- *Have a picnic in the park* with family and friends. A quick and easy way to get nature immersion.
- *Do a 5-senses exercise/meditation* - 5 things that you see, 4 things that you hear, 3 things that you feel, 2 things that you smell and 1 thing that you can taste.
- *Find Your Treasure* - look for something in nature that resonates with you or makes you happy.
- *Self-Identification* - pick a word or phrase that describes you and look for that word or phrase in nature.
- *Color Count* - search for and count all the different colors you see, or different shades of the same color.
- *Take pictures* of trees, flowers and nature. Studies show that simply viewing nature photos is healing.



## Leave No Trace & Relevant Life Lessons

PLAN AHEAD AND PREPARE

BE ORGANIZED

HIKE AND CAMP ON DURABLE SURFACES

BE IN ACCORDANCE

DISPOSE OF WASTE PROPERLY

BE A GOOD STEWARD

LEAVE WHAT YOU FIND

BE A PRODUCER NOT A CONSUMER

MINIMIZE CAMPFIRE IMPACTS

BE WISE

RESPECT WILDLIFE

BE COMPASSIONATE

BE CONSIDERATE OF OTHER VISITORS

BE RESPECTFUL