GUT RESTORATION PLAN

DR. HELEN'S GUT REPAIR PROTOCOL™

Restore the Gut–Brain Connection
Repair the Intestinal Barrier
Support the Microbiome

A Physician's Guide to Understanding Gut Dysfunction
and Supporting Intestinal Repair

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WHY YOUR GUT MATTERS

Your digestive system is far more than a place where food is broken down.

It is a **central control center for the immune system**, **metabolism, and brain chemistry**.

Inside the digestive tract lives an ecosystem of **trillions of microorganisms**, known as the **gut microbiome**. These organisms interact with:

- the immune system
- the nervous system
- hormones
- metabolism
- brain chemistry

When the gut is functioning properly, it supports:

✓ efficient digestion
✓ balanced immune function
✓ stable blood sugar
✓ mental clarity
✓ emotional balance
✓ reduced inflammation

However, when the gut barrier becomes damaged or the microbiome becomes imbalanced, it can contribute to **symptoms throughout the body**.

WHAT HAPPENS WHEN THE GUT IS DAMAGED?

The intestinal lining is made of a **single layer of cells** connected by structures called **tight junctions**.

These junctions act as a protective barrier, allowing nutrients into the bloodstream while keeping harmful substances out.

When the gut becomes irritated or inflamed, these junctions can loosen.

This may allow substances such as:

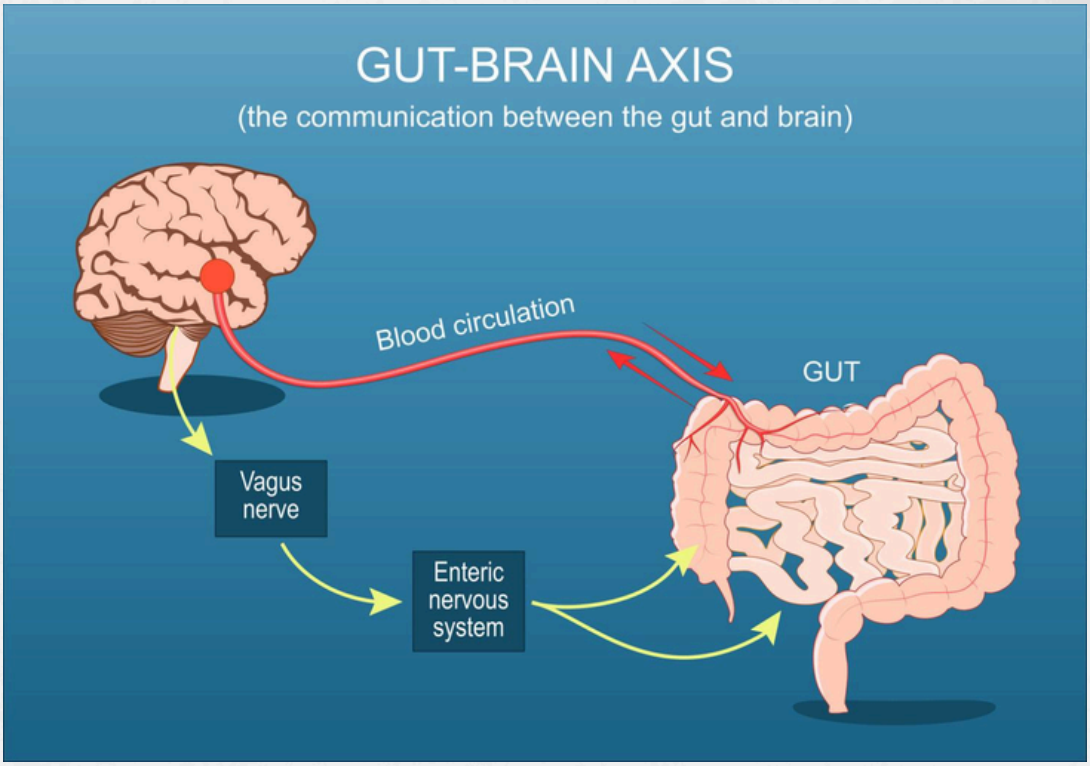
- toxins
- bacterial fragments
- inflammatory molecules
- undigested food proteins

to enter the bloodstream.

This process is known as **increased intestinal permeability**, sometimes referred to as "leaky gut."

This immune activation may contribute to **inflammation throughout the body**.

THE GUT–BRAIN AXIS



The digestive system and brain communicate continuously through a network known as the **gut–brain axis**.

Communication occurs through:

- the nervous system
- immune signaling
- hormones
- microbial metabolites

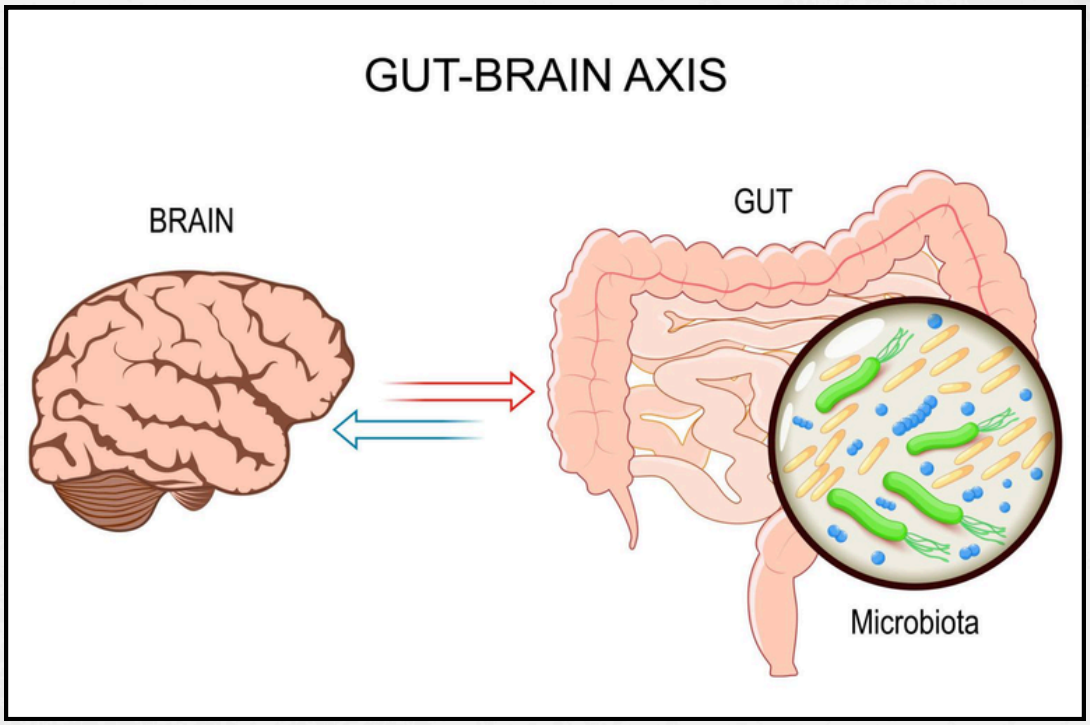
A major pathway is the **vagus nerve**, which connects the brain directly to the digestive system.

This pathway influences:

- digestion
- inflammation
- mood
- cognitive performance
- stress responses

Because of this connection, disturbances in gut health may influence **brain function, mood, and memory**.

YOUR GUT HELPS REGULATE BRAIN CHEMISTRY

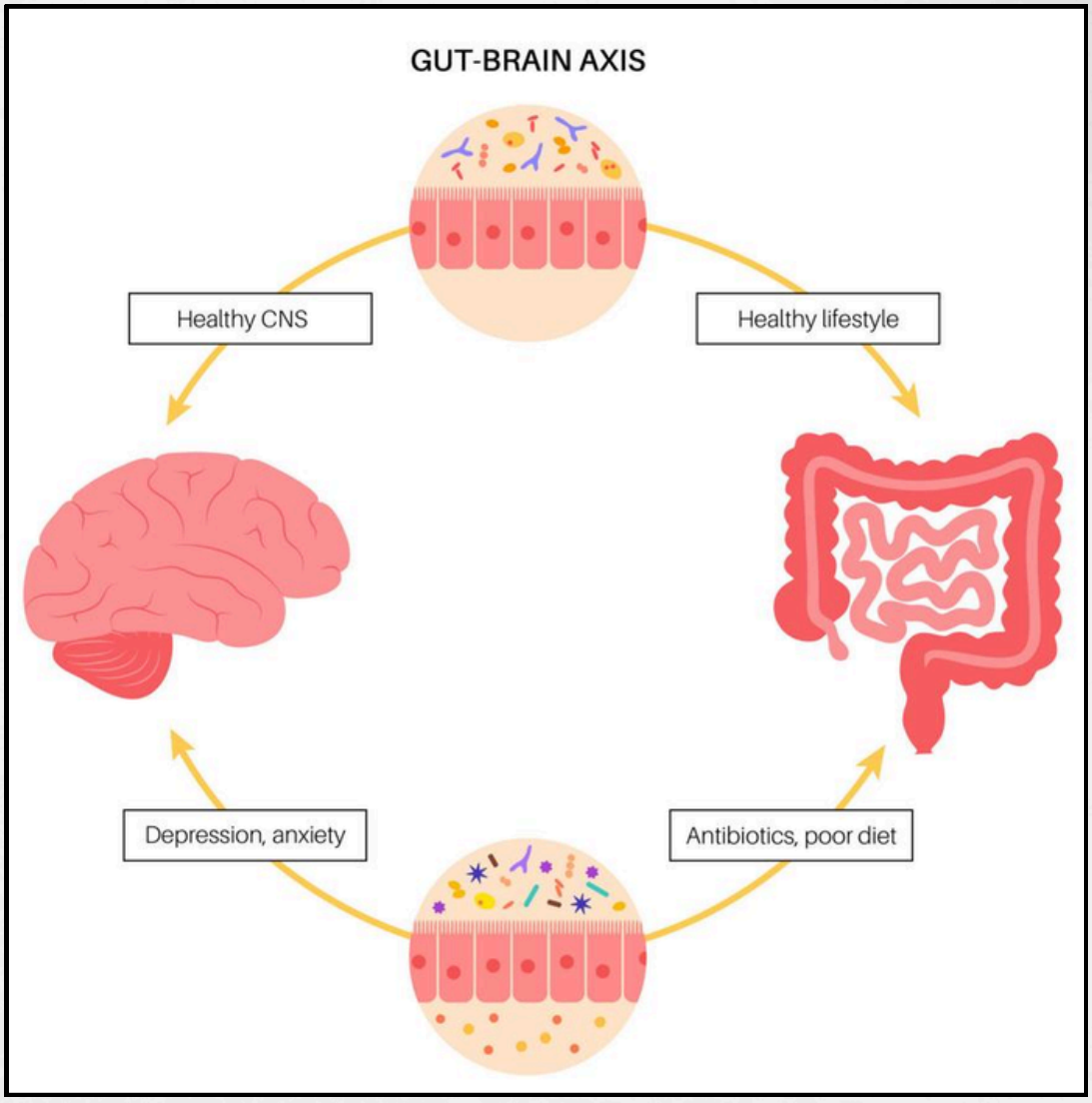


The gut microbiome plays an important role in regulating neurotransmitters such as:

- serotonin
- dopamine
- GABA
- acetylcholine

Approximately **90% of the body's serotonin is produced in the digestive tract**.

When gut bacteria become imbalanced, these pathways may be disrupted, potentially affecting mood, concentration, and memory.



This illustration shows the direct connection between your gut and your brain, known as the gut–brain axis.

This communication system helps regulate:

- digestion
- inflammation
- mood
- memory
- energy levels

KEY COMPONENTS

1. The Brain
The control center that processes signals from the body and regulates mood, cognition, and stress responses.

2. The Vagus Nerve
The **main communication highway** between the gut and the brain.

It sends signals in both directions and plays a role in:
- digestion
- inflammation control
- nervous system regulation

3. The Gut Microbiome
Trillions of bacteria in the digestive tract that influence:
- immune function
- metabolism
- neurotransmitter production

These microbes produce signals that communicate directly with the brain.

4. Neurotransmitters
Chemical messengers influenced by the gut, including:
- serotonin (mood)
- dopamine (motivation)
- GABA (calming effect)

5. The Intestinal Barrier
A protective lining that controls what enters the bloodstream. When damaged, it may allow inflammatory signals to travel throughout the body—including to the brain.

WHY THIS MATTERS

When the gut is out of balance, signals sent to the brain may also be affected.

This may contribute to:
- brain fog
- memory issues
- fatigue
- mood changes
- difficulty concentrating

This is why gut health is often closely connected to **both physical and cognitive symptoms**.

YOUR GUT HELPS REGULATE BRAIN CHEMISTRY

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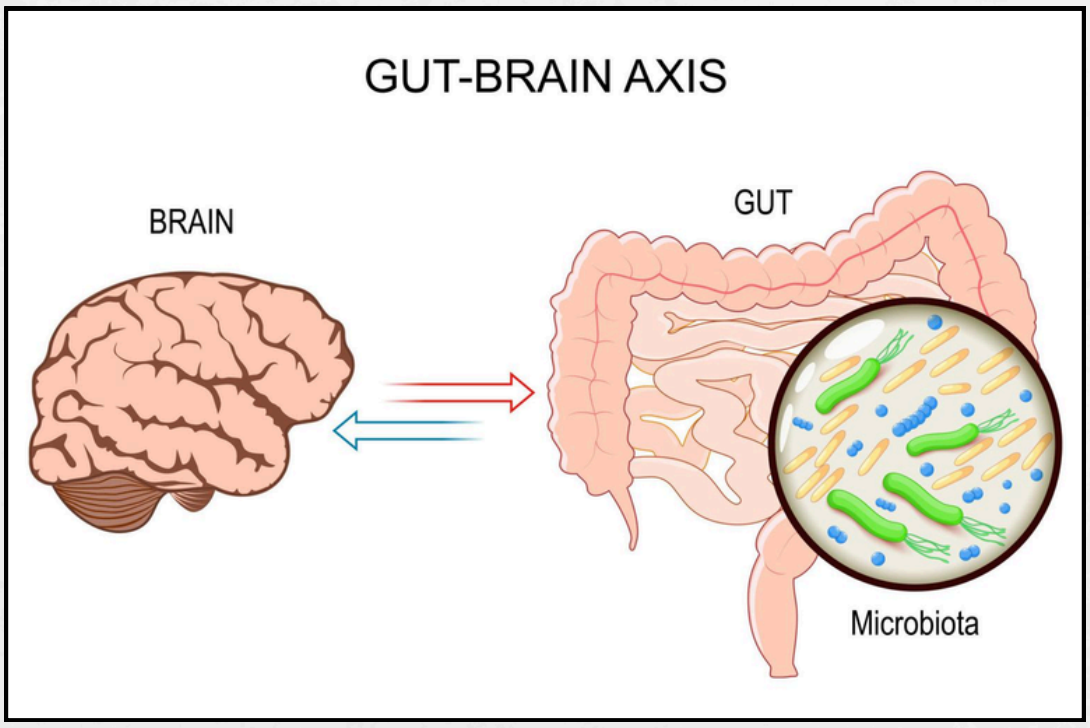


SYMPTOMS THAT MAY BE LINKED TO GUT DYSFUNCTION

Digestive Symptoms

- ☐ bloating
- ☐ reflux
- ☐ constipation
- ☐ diarrhea
- ☐ abdominal discomfort
- ☐ gas
- ☐ food sensitivities

Brain & Cognitive Symptoms

- ☐ brain fog
- ☐ anxiety
- ☐ depression
- ☐ difficulty concentrating
- ☐ memory issues
- ☐ fatigue

Whole Body Symptoms

- ☐ joint pain
- ☐ skin problems
- ☐ autoimmune conditions
- ☐ chronic inflammation
- ☐ hormone imbalance

SEVEN HIDDEN SIGNS YOUR GUT MAY BE AFFECTING YOUR BRAIN

Many people assume gut problems only cause digestive symptoms.

However, gut dysfunction often shows up in **unexpected ways**.

Watch for these subtle signs:

1. Brain fog after meals
2. Difficulty concentrating or staying focused
3. Memory lapses or trouble recalling information
4. Mood changes such as anxiety or irritability
5. Fatigue even after adequate sleep
6. Sugar cravings or unstable blood sugar
7. Feeling mentally "sluggish" or overwhelmed

These symptoms may reflect **disruptions in the gut–brain connection**.

WHAT CAN DAMAGE THE GUT?

Several factors may disrupt the intestinal lining or microbiome.

Diet

- ultra-processed foods
- refined sugar
- alcohol
- food additives

Medications

- antibiotics
- NSAIDs
- acid-suppressing medications

Environmental Exposures

- pesticides
- mold toxins
- heavy metals

Lifestyle Stressors

- chronic stress
- poor sleep
- sedentary lifestyle

THE FIVE ROOT CAUSES OF GUT DAMAGE MANY PEOPLE OVERLOOK

Many people believe gut problems are caused only by food choices.

While nutrition is extremely important, digestive dysfunction often develops from multiple underlying contributors that are not always obvious.

Understanding these deeper drivers is essential for effective gut restoration.

Below are **five common root causes of gut damage that are frequently overlooked**.

1. Microbiome Imbalance (Dysbiosis)

The gut contains trillions of bacteria that help regulate digestion, immune function, and metabolism.

When beneficial bacteria are reduced and harmful microbes increase, this imbalance can lead to:

- inflammation
- digestive symptoms
- immune disruption
- changes in brain signaling

This imbalance is known as **dysbiosis** and is one of the most common contributors to gut dysfunction.

2. Medication Effects

Certain medications can significantly affect the gut microbiome and intestinal lining.

Examples include:
- antibiotics
- anti-inflammatory medications (NSAIDs)
- acid-suppressing medications
- some psychiatric medications

These medications can disrupt microbial balance and may contribute to increased intestinal permeability.

3. Environmental Exposures

Environmental factors may also affect gut health.
Examples include:
- pesticides and herbicides
- mold toxins
- heavy metals
- chemical exposures

These substances may influence the microbiome and increase inflammation in the digestive system.

4. Chronic Stress and Nervous System Imbalance

The digestive system is closely connected to the nervous system through the **gut–brain axis**.

Chronic stress can affect:

- digestive enzyme production
- intestinal motility
- gut barrier integrity
- microbial balance

When the nervous system remains in a prolonged stress response, digestion and gut repair can become impaired.

5. Metabolic and Blood Sugar Imbalance

Blood sugar fluctuations can influence inflammation and the microbiome.

Metabolic stress may affect:

- intestinal barrier function
- microbial diversity
- immune signaling

Because metabolism and gut health are closely connected, addressing metabolic health is often an important part of gut restoration.

WHY IDENTIFYING THE ROOT CAUSE MATTERS

Gut repair strategies are most effective when the **underlying drivers of dysfunction are identified and addressed**.

While foundational strategies such as nutrition and probiotics may support healing, a deeper evaluation often helps determine:

- what is contributing to symptoms
- which therapies are most appropriate
- how to restore balance efficiently

This is why many patients benefit from a **personalized evaluation**.

Next Step

If you suspect your symptoms may be connected to gut dysfunction, a deeper assessment can help identify the underlying causes.

In a **Precision Visit**, we evaluate key factors influencing gut health and develop a personalized strategy for restoration.

DR. HELEN'S 4R GUT RESTORATION FRAMEWORK™

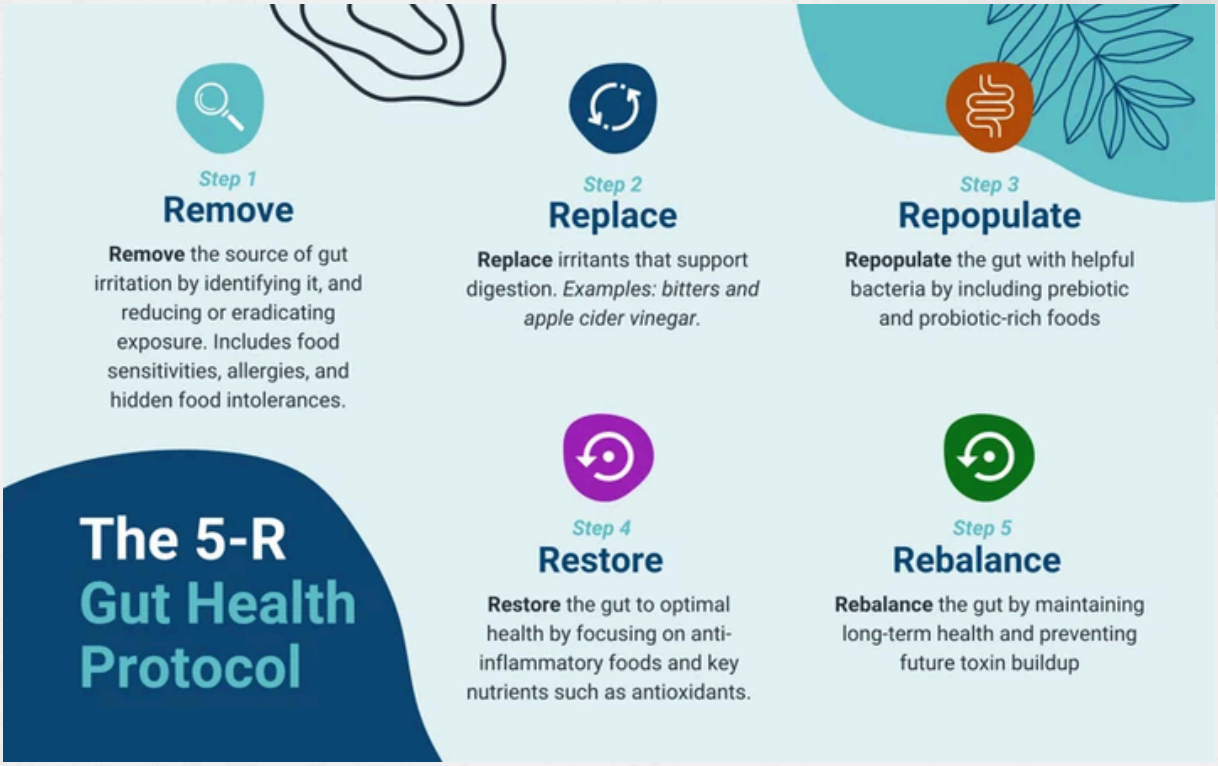
The most effective gut restoration plans address all four phases in the correct sequence.

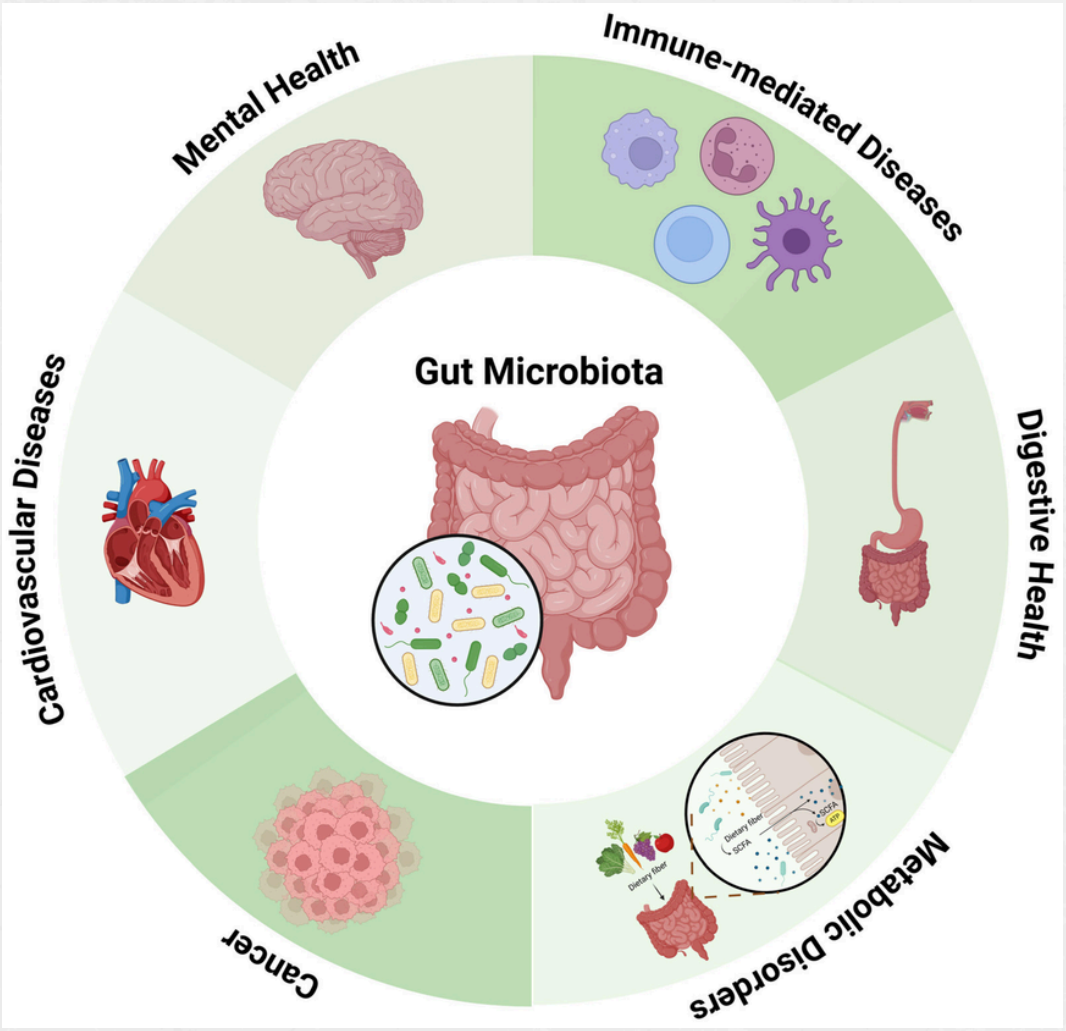
REMOVE
Reduce irritants that damage the intestinal lining.

REPAIR
Support regeneration of the intestinal barrier.

REINOCULATE
Restore beneficial bacteria.

REBALANCE
Support healthy communication between the gut and brain.


The 5-R
Gut Health
Protocol
Step 1
Remove
Remove the source of gut irritation by identifying it, and reducing or eradicating exposure. Includes food sensitivities, allergies, and hidden food intolerances.
Step 2
Replace
Replace irritants that support digestion. Examples: bitters and apple cider vinegar.
Step 3
Repopulate
Repopulate the gut with helpful bacteria by including prebiotic and probiotic-rich foods
Step 4
Restore
Restore the gut to optimal health by focusing on anti-inflammatory foods and key nutrients such as antioxidants.
Step 5
Rebalance
Rebalance the gut by maintaining long-term health and preventing future toxin buildup


Mental Health
Immune-mediated Diseases
Gut Microbiota
Cardiovascular Diseases
Digestive Health
Cancer
Metabolic Disorders
Dietary fiber
SCFA

HOW THE GUT IS RESTORED

Gut repair is not a single step—it is a **structured process**.

Each phase builds on the one before it to support **lasting restoration of the intestinal barrier, microbiome, and gut–brain connection**.

The 4 Phases

REMOVE

— Reduce irritants that damage the gut lining.

Examples:
- ultra-processed foods
- excess sugar
- alcohol
- food sensitivities
- medications that disrupt gut bacteria

Goal:
Calm inflammation and reduce ongoing damage.

REPAIR

— Support healing of the intestinal barrier.

Key supports include:
- targeted nutrients
- Glutagenics®
- anti-inflammatory nutrition

Goal:
Strengthen and restore the protective gut lining.

REINOCULATE

— Restore beneficial bacteria.

Support may include:
• multi-strain probiotics
• UltraFlora Spectrum®
• Saccharomyces boulardii

Goal:
Rebuild a healthy and diverse microbiome.

REBALANCE

— Support the gut–brain connection.

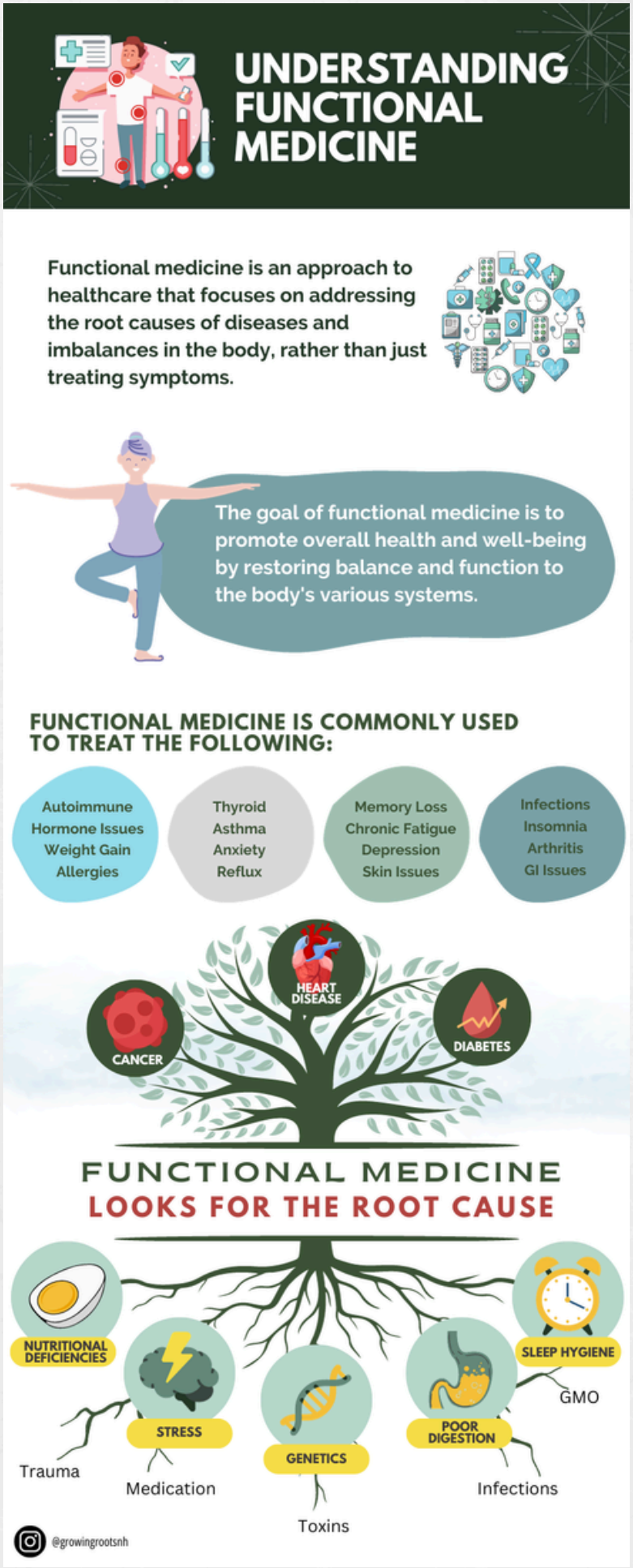
Support may include:
• restorative sleep
• physical activity
• stress reduction
• slow diaphragmatic breathing to support vagus nerve activity

Goal:
Improve communication between the gut and brain.

Why the 4R Approach Matters

Skipping steps or addressing them out of order may limit results.

When each phase is addressed appropriately, it allows for a more **complete and sustained restoration of gut health**.


UNDERSTANDING FUNCTIONAL MEDICINE
Functional medicine is an approach to healthcare that focuses on addressing the root causes of diseases and imbalances in the body, rather than just treating symptoms.
The goal of functional medicine is to promote overall health and well-being by restoring balance and function to the body's various systems.
FUNCTIONAL MEDICINE IS COMMONLY USED TO TREAT THE FOLLOWING:
Autoimmune
Hormone Issues
Weight Gain
Allergies
Thyroid
Asthma
Anxiety
Reflux
Memory Loss
Chronic Fatigue
Depression
Skin Issues
Infections
Insomnia
Arthritis
GI Issues
HEART DISEASE
CANCER
DIABETES
FUNCTIONAL MEDICINE
LOOKS FOR THE ROOT CAUSE
NUTRITIONAL DEFICIENCIES
STRESS
GENETICS
POOR DIGESTION
SLEEP HYGIENE
Trauma
Medication
Toxins
GMO
Infections
@growingrootsnh

FOUNDATIONAL GUT REPAIR SUPPORT

Remove Irritants

- minimize ultra-processed foods
- reduce refined sugar
- limit alcohol
- identify food triggers

Repair the Intestinal Lining

Glutagenics®

Formulations containing nutrients such as:
- L-glutamine
- mucosal support compounds
- botanical extracts

These nutrients help support **intestinal barrier integrity**.

Restore the Microbiome
A **multi-strain probiotic** helps restore beneficial gut bacteria.

Important features include:
- multiple Lactobacillus strains
- multiple Bifidobacterium strains

Include Saccharomyces boulardii

This beneficial yeast has been studied for its ability to:
- support microbial balance
- protect the intestinal barrier
- support immune defenses

GUT DAMAGE SELF-ASSESSMENT

Check any symptoms you experience regularly.

Digestive symptoms

☐ bloating
☐ gas
☐ reflux
☐ constipation
☐ diarrhea

Brain symptoms

☐ brain fog
☐ fatigue
☐ anxiety
☐ memory issues

Whole-body symptoms

☐ skin issues
☐ joint pain
☐ inflammation
☐ autoimmune symptoms

Score

0-3 symptoms
Possible mild imbalance

4-8 symptoms
Gut dysfunction may be present

9+ symptoms
Your gut may need targeted support and evaluation.

DR. HELEN'S GUT DAMAGE SCORE™

This simple scoring tool helps identify whether your symptoms may be related to intestinal barrier stress or **microbiome imbalance**.

For each symptom you experience regularly, give yourself 1 point.

Digestive Symptoms

☐ Bloating
☐ Gas
☐ Reflux or heartburn
☐ Constipation
☐ Diarrhea
☐ Abdominal discomfort
☐ Food sensitivities

Brain & Cognitive Symptoms

☐ Brain fog
☐ Difficulty concentrating
☐ Memory issues
☐ Fatigue or low energy
☐ Mood changes (anxiety, irritability, or low mood)

Whole-Body Symptoms

☐ Joint pain or stiffness
☐ Skin issues (eczema, rashes, acne)
☐ Frequent headaches
☐ Chronic inflammation
☐ Hormone imbalance

Metabolic Symptoms

☐ Strong sugar cravings
☐ Energy crashes after meals
☐ Difficulty losing weight
☐ Blood sugar fluctuations

Your Score

0–4 Points
Your gut may be functioning relatively well, though small imbalances may still be present.

5–9 Points
Your symptoms may suggest gut stress or microbiome imbalance. Supporting gut repair may be beneficial.

10–15 Points
Your symptoms suggest moderate gut dysfunction that may benefit from a targeted repair strategy.

16+ Points
Your symptoms may suggest significant intestinal barrier stress and microbiome imbalance. A deeper evaluation may help identify underlying contributors.

Important Note
This score is not a medical diagnosis. It is simply a tool to help you recognize patterns that may indicate gut dysfunction.

Because many factors can influence gut health—including microbiome imbalance, medications, environmental exposures, and metabolic stress—a personalized evaluation often helps determine the most effective strategy.

DR. HELEN'S GUT DAMAGE SCORE™

Answer YES or NO

Do you experience digestive discomfort after meals? _____

Do you struggle with brain fog or poor concentration? _____

Have you noticed increasing food sensitivities? _____

Do you feel fatigued even after sleeping? _____

Do you experience mood changes such as anxiety or irritability? _____

Do you have memory issues? _____

Have you taken antibiotics multiple times? _____

Do you regularly eat processed foods or sugar? _____

If you answered YES to **3 or more**, your gut may be under stress.

Many people are surprised to discover that symptoms like brain fog, memory issues, fatigue, and mood changes may begin in the gut.

WHAT THESE QUESTIONS MAY INDICATE

If you answered YES to several of these questions, it may suggest that deeper factors are contributing to your symptoms.

Gut dysfunction is often influenced by multiple contributors working together, such as:

- microbiome imbalance
- metabolic stress
- environmental exposures
- medication effects
- inflammation

When these factors are identified, treatment can become much more targeted and effective.

SUPPLEMENT SUPPORT

To begin supporting your gut repair protocol, the following supplements may be helpful.

Glutagenics®

Supports intestinal barrier repair.

UltraFlora Spectrum®

A multi-strain probiotic that includes:

- Lactobacillus strains
- Bifidobacterium strains
- **Saccharomyces boulardii**

These products help support:

- intestinal barrier function
- microbiome balance
- digestive health

ORDER YOUR SUPPLEMENTS

You may order recommended supplements here:

Glutagenics®
UltraFlora Spectrum®

https://patientdirect.pureencapsulationspro.com/patients/sign_up?practice_code=983144

WHY GUT REPAIR OFTEN REQUIRES GUIDANCE

Many people begin supporting their gut health with nutrition, probiotics, or supplements.

These foundational steps can certainly help.

However, digestive symptoms often arise from multiple underlying contributors, including:

- microbiome imbalance
- environmental exposures
- metabolic stress
- medication effects
- nutrient deficiencies

When these factors are identified, treatment can be targeted and much more effective.

TEN QUESTIONS TO ASK BEFORE STARTING A GUT REPAIR PROTOCOL

Many people begin supporting their gut health with nutrition changes, probiotics, or supplements.

These steps can certainly be helpful. However, because digestive symptoms can have many underlying drivers, it is often helpful to consider a few important questions first.

Take a moment to reflect on the following:

1. Have your digestive symptoms been present for several months or longer? _____

2. Do your symptoms affect more than just digestion (such as brain fog, fatigue, or memory issues)? _____

3. Have you tried probiotics or supplements before with limited improvement? _____

4. Do your symptoms worsen during times of stress or poor sleep? _____

5. Have you taken antibiotics multiple times over the years? _____

6. Do you experience food sensitivities that seem to be increasing? _____

7. Do you experience symptoms such as fatigue, brain fog, or difficulty concentrating after meals? _____

8. Have you noticed changes in your mood, anxiety levels, or mental clarity? _____

9. Do you struggle with blood sugar fluctuations or strong sugar cravings? _____

10. Do you feel like something in your health is "off," but routine testing has not provided answers? _____

PRECISION GUT EVALUATION

If you recognize yourself in the symptoms described in this guide, the next step is identifying why your gut is out of balance.

During a Precision Visit, we evaluate:

- digestive function
- microbiome balance
- inflammation
- metabolic health
- contributing lifestyle factors

This allows us to design a personalized gut restoration strategy.

BEGIN YOUR GUT RESTORATION JOURNEY

If you would like help identifying the root causes of your symptoms, we invite you to schedule a Precision Visit if you haven't already.

During this consultation we will:

- review your health history
- identify potential drivers of gut dysfunction
- determine appropriate testing
- develop a personalized strategy

>> SCHEDULE YOUR PRECISION VISIT <<

REFERENCES

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