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## The Hidden Risks of Medications: When “*It Can’t Hurt*” Turns Out to Be Wrong

**5 Common Foods That Can Harbor Parasites (And How to Protect Your Family)**

**7 Natural Sleep Remedies That Actually Work (According to Science)**

**6 Medicinal Plants Every Homesteader Should Grow This Spring for a Complete Herbal First Aid Kit**



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# Letter from the Editor



This month's issue begins with a question that too few people ever think to ask: What if the treatment is *making me worse*?

In our lead article, Dr. Scott Saunders shares the story of a 50-year-old man who went from training for a triathlon to being unable to dress himself — all within three months. He saw specialist after specialist. He was diagnosed with fibromyalgia, carpal tunnel syndrome, and possible autoimmune disease. He was headed for surgery. But when Dr. Saunders sat down and did something remarkably simple — reviewed the man's medication list — the real culprit emerged: a common blood pressure pill that had been quietly depleting his body of the very minerals it needed to function.

It's a story that should stop every one of us in our tracks. And it raises a bigger question that runs through this entire issue: *Who is actually responsible for your health?*

The answer, as Dr. Saunders makes clear, is you.

That's why we follow his article with three pieces designed to put practical health knowledge directly in your hands. Our guide to six medicinal plants you can grow this spring gives you the tools to build a home apothecary from your own garden. Our deep dive into natural sleep remedies separates what actually works from what's just marketing. And our investigation into common foods that harbor parasites arms you with the awareness to protect your family at the grocery store, the kitchen sink, and the dinner table.

The thread connecting all four articles is simple: the more you know, the less you have to depend on a system that doesn't always have your best interests at heart. Knowledge is the original home cure — and it always works

*Cheryl Ravey*

*Editor, Home Cures That Work*



# The Hidden Risks of Medications: When “*It Can’t Hurt*” Turns Out to Be Wrong.

Recently, a 50-year-old man presented with excruciating, widespread joint pain, swelling, and weakness for over three months. He had trouble getting out of bed, couldn’t make a fist, and required his wife’s assistance just to move at night. He couldn’t bend over to tie his shoes. He couldn’t dress himself.

He went to his doctor and was sent to several specialists. After exams and a battery of tests, he was labeled with fibromyalgia, carpal tunnel syndrome, and possible autoimmune disease. Steroids helped the pain a little, but nothing fixed the problem—he still couldn’t function. Worse, his function continued to decline. The hand surgeon scheduled him for carpal tunnel surgery. He didn’t want surgery, so he came in to see me to find out what was going on.

When he came in, the first thing we did was review the past. He was fine until about three months before. He was overweight and decided to train for a triathlon. The more he trained, the worse he got. He had to quit exercising because it was getting too painful. He was not recovering. This was our clue to the cause. When we reviewed his medications, one stood out as the culprit. It is well-documented that thiazide diuretics cause these problems: [1]

## 1. Electrolyte Depletion: Sodium, Potassium, Magnesium, and Chloride

- Low potassium → muscle weakness, cramps, impaired glycogen storage, and disrupted cardiac conduction.

- Low magnesium → impaired ATP synthesis (mitochondrial inefficiency), neuromuscular irritability, and increased inflammation.
- Low chloride and sodium → reduced plasma volume, hypotensive episodes during workouts, and reduced nutrient delivery to muscle tissue.

## 2. Reduced Muscle and Tendon Perfusion:

Chronic dehydration decreases oxygen and nutrient delivery to tissues.

## 3. Altered Calcium Handling and Collagen Turnover:

Cramps, pain, and poor repair

**4. Mitochondrial Stress and Fatigue:** There is less energy, and the cells cannot make more mitochondria to fill the need for energy.

**5. Amplified Inflammatory Signaling:** More cytokines (IL-6) causing oxidative stress and pain.

**6. Uric Acid and Connective Tissue Stress:** Gout and joint pain.

**7. Metabolic Derailment:** Insulin resistance prevents fat-burning causing low energy to the muscles and other cells.

So, for all these reasons, this man was having severe reactions to the hypertension medication he was taking. He had been on it for several years, so his electrolytes would have been depleted. Also, it would not have been so severe if he hadn't started working out. But there are many with "fibromyalgia," "carpal tunnel syndrome," or chronic pain who are simply toxic on such medications who aren't doing heavy physical exercise.

### **The Medical Mindset: "It Will Probably Help, and It Can't Hurt"**

Physicians are trained in a pharmaceutical-centered model where treatment equals prescription. The prevailing sentiment is that drugs can only help, they can't hurt. I have heard cardiologists say that drugs like statins should be "in the water[2]" so everyone can benefit. Also, we are taught that if a blood pressure pill doesn't work, another is added. I have seen some on four and five blood pressure medications—and still have hypertension.

Mental illness is not immune from this teaching. If depression persists, a second antidepressant joins the first. Rarely does anyone stop to ask whether the first drug may actually be worsening the situation, even though the "black-box warning" on the package insert says it can. Doctors tend to ignore the package insert.

These problems arise from:

1. Blind reliance on guideline medicine written under industry influence. This is basically just laziness because they don't do their own research, relying instead on drug company marketing campaigns.

2. The failure to revisit first principles—that every drug is a controlled form of poison.[3]

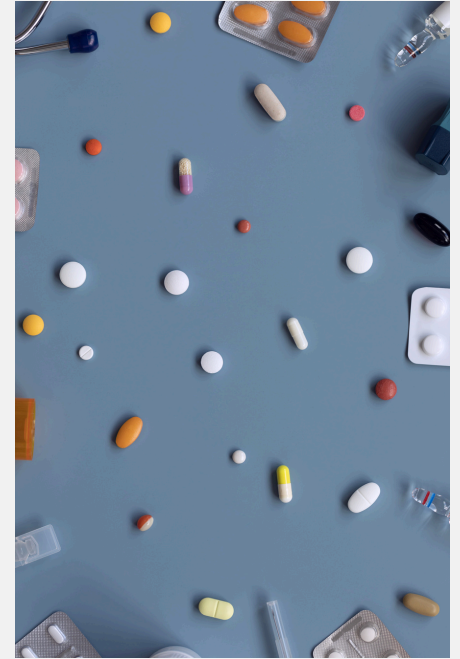
3. The institutional illusion that adverse events are "rare exceptions," rather than underreported central features. Most adverse events are not reported so nobody knows what actually causes toxicity.[4]

### **The Real Problem: Risk-Benefit Illiteracy**

Physicians and patients alike are poor at estimating risk vs. benefit because:

- Clinical trial data often exclude real-world populations such as those who are elderly and have multiple problems or on numerous medications.
- Selective reporting and semantic manipulation minimize adverse effects (e.g. "side effect" instead of "toxic effect").
- Drug companies fund courses for doctors to frame medications as default solutions rather than last resorts.

Ironically, the biggest side effect of overprescribing is diagnostic blindness: doctors stop searching for root causes once a pill enters the picture. The pills can relieve the symptoms, so the doctor ceases to look for a diagnosis, or the underlying cause of the condition.



## The Hidden Epidemic: Polypharmacy

I was medical director of nursing homes, long-term care facilities, for many years. Because the people admitted to these facilities have health problems, it is common for them to be on multiple medications. Some are on over twenty prescriptions! Once one drug triggers a new symptom, another drug is added to fix that symptom, creating a cascade of iatrogenic illness. A “drug for the drug” chain reaction. By age 50, the average American is on five prescription drugs—and by 65, over seven. Yet the clinical trials guiding these drugs were never done on people taking such combinations. This is the silent chemical experiment playing out across modern civilization.

## Polypharmacy and Mortality: When the “Cure” Outpaces the Disease

After four or five prescriptions, you enter statistical quicksand. The probability of a fatal drug interaction or adverse effect surpasses the likelihood of dying from the diseases those drugs aim to manage. Each added medication multiplies—not merely adds—to the interaction network. Its combinatorial chemistry conducted inside a human body.

Imagine this: if one supposedly benign antihypertensive (hydrochlorothiazide, or HCTZ) could nearly cripple an otherwise healthy young man, think about what happens at four, six, or eight concurrent drugs.

Multiple large-scale cohort studies have shown a sharp inflection point in risk once a patient is taking five or more medications simultaneously (the term polypharmacy threshold).[5] Beyond this point, each additional drug increases the probability of:

- Hospitalization for adverse drug events (ADEs).
- Life-threatening interactions.
- Cognitive decline and functional dependence.
- All-cause mortality.
- “Once you cross five drugs, you’re more likely to die from your prescriptions than from your diseases.” This is not metaphorical. It comes from long-term outcome data in elderly and middle-aged populations alike.

## The Data

- Adverse drug reactions are now a top 5 cause of death in the United States according to aggregate hospital statistics — rivaling stroke.[6]
- Roughly 10–15% of hospital admissions among adults over 65 are directly attributable to medication side-effects or drug interactions.[7]
- The average American over 50 takes 4–6 prescription medications daily, not counting over-the-counter drugs and supplements — exactly the range where cumulative toxicity and pharmacologic antagonism explode.[8]
- A person on eight medications doesn't face double the risk of one on four — they face roughly five times the possible interactions. [9]
- This creates the tragic feedback loop: more symptoms » more drugs » more toxicity » death.

## Towards a More Rational Drug Policy

There are ways to protect yourself from drug toxicity:

### 1. Review Risks and Benefits Before Taking a Drug

This seems obvious, yet it is nearly impossible for most patients. Risk sections found in the drug inserts are written to obscure probability. Drug companies bury adverse events under legalese or present them as '1 in 1,000,' without specifying how long those observations lasted or who they studied.

- Always seek independent, non-industry-funded data if possible.
- Ask the doctor questions about toxicity — read the package insert together and have the doctor explain what they mean.

- Be careful with AI inquiries, most AI get their information from drug company marketing campaigns, and not from science.

### 2. Recognize “Side Effects” as Toxicity

When a drug causes fatigue, liver enzyme elevation, or tremor, it's not a side effect—it's a systemic reaction to a chemical burden. Treat these as signs of dose-dependent toxicity, not mere inconveniences. The toxicity threshold differs for everyone due to biology, nutrient status, and cumulative exposures.

Ask what tests will need to be done to evaluate toxicity before and after taking a medication.

### 3. Seek Non-Pharmacologic Solutions First

Before assuming lifelong need for medication, look for the underlying cause.

Hypertension, for instance, has over a hundred potential etiologies—from insulin resistance, adrenal dysfunction, kidney problems, and magnesium deficiency to sleep apnea or chronic toxicity.[10] Likewise, depression may stem from thyroid imbalance, low vitamin D, or chronic inflammation. Drugs mask the consequences but rarely resolve the causes.

### 4. Reserve Medications for When They Are Truly Necessary

When non-drug interventions fail or an acute emergency demands action—by all means, prescribe wisely. Antibiotics for pneumonia, insulin for type 1 diabetes, or statins for genetic hypercholesterolemia can be life-saving. But use these for targeted uses, not blanket prevention strategies for entire populations.

### 5. Ameliorate or Counteract Known Drug Toxicity

Every medication that must be taken long-term deserves a companion strategy to reduce harm. For example:

- Antibiotics » probiotics or fermented foods
- Statins » CoQ10 and metabolic monitoring
- Corticosteroids » bone protection, vitamin D, magnesium
- Antihypertensives » regular electrolyte testing and kidney support

This is not “alternative medicine.” It’s responsible pharmacology. It starts with each patient understanding that a medical doctor is a salesperson, representing drug companies. They use the words, “safe and effective” without their usual dictionary definition. Everyone must understand that medications are toxins, and some people are more sensitive to their effects.

The doctor does not know who will respond well, and who will become toxic. Each patient must assess the individual risks and benefits of each medication.



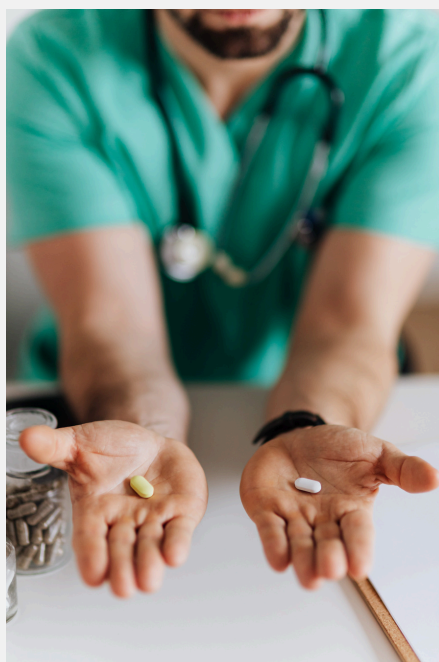
## Restoring Sanity

The rational drug policy of the future must reclaim two lost virtues: individualization and restraint.

The ancient healer, Hippocrates, wrote: “Above all, do no harm.” A clinician’s job is not to suppress symptoms but to interpret them, discern causality, and use the least invasive means consistent with healing. Sometimes, the act of stopping a medication is the most therapeutic prescription of all.

After going off the medication, my patient immediately began to feel better. A month later, he was dressing himself, and walking, but hadn’t yet started his workout routine due to continued pain.

His detox program included losing thirty pounds, which he successfully completed. Still, it will take a year or so to get the mitochondria back, making good energy.



## Remember:

- Every medicine is a potential toxin—dose and context determine the outcome.
- Doctors must reacquire the art of deprescribing, but until then, the patient will need to stop medications that are not working or are causing adverse reactions.
- Patients may need to collect their own baseline data (labs, symptoms, nutrition, toxic exposures) before starting any long-term drug.
- Transparency and independent oversight—not pharmaceutical marketing—must guide modern therapeutics. Look for independent research on any drug.



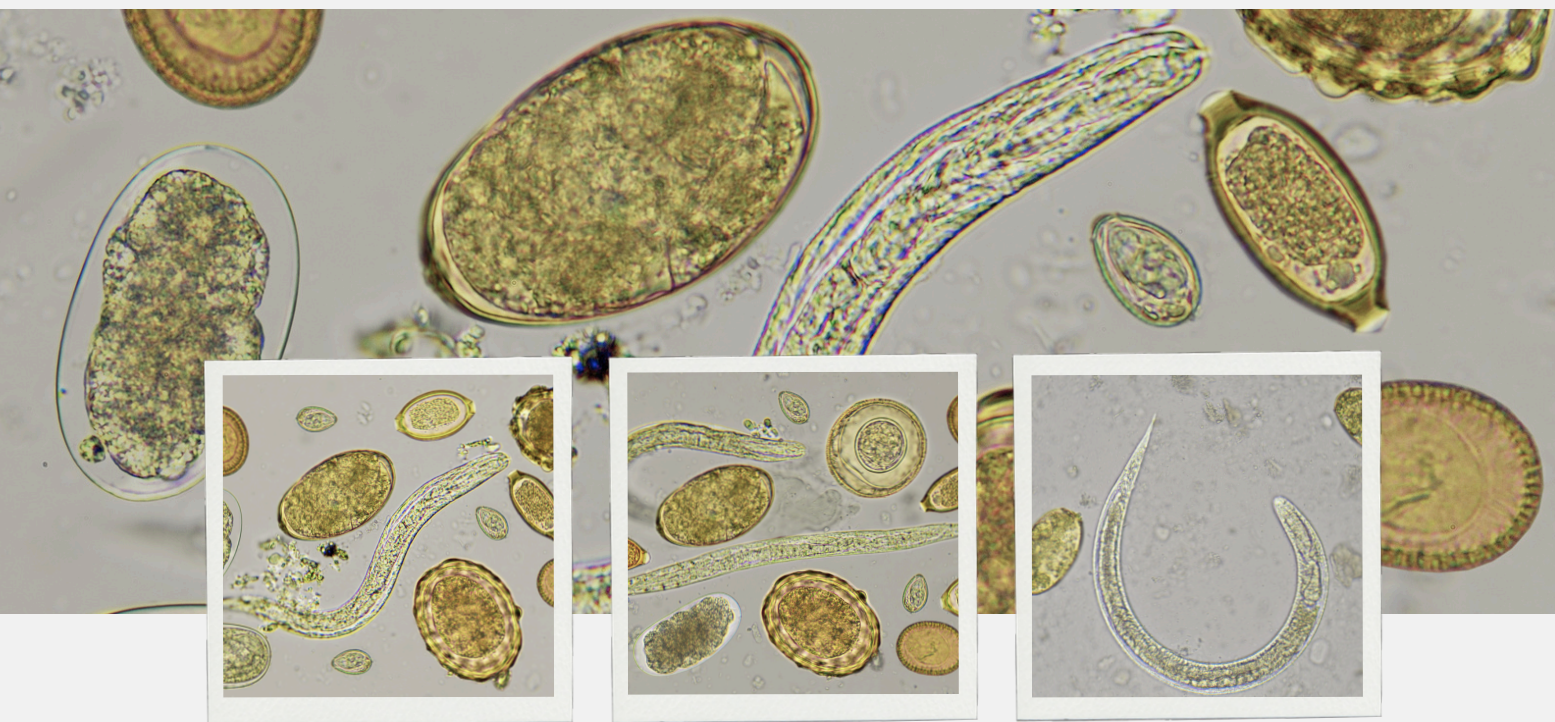
**Most importantly:** Find the underlying root cause of symptoms, instead of suppressing them. Before the advent of modern medicine, Thomas Edison said:

"The doctor of the future will give no medicine but will interest his patient in the care of the human frame, in diet, and in the cause and prevention of disease."<sup>[11]</sup>

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- [3] <https://www.openaccessjournals.com/articles/pharmaceutical-toxicology-understanding-the-risks-and-benefits-of-medications.pdf>
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# 5 Common Foods That Can Harbor Parasites

## *(And How to Protect Your Family)*

*They're Not Just a Third-World Problem — These Everyday Foods Carry Real Risks Right Here at Home*

When most Americans think about parasites, they picture something that happens "over there" — in developing countries with unsafe water or unsanitary food handling. It's a comfortable assumption, but it's wrong.

The truth is that parasites are far more common in the U.S. food supply than most people realize. The FAO and World Health Organization jointly ranked the top 24 foodborne parasites of global concern, and nearly all of them can be transmitted through foods you encounter every week at the grocery store,

the farmer's market, or your favorite restaurant (FAO/WHO, 2014). From the sushi counter to the produce aisle to your own kitchen faucet, the opportunities for parasitic exposure are hiding in plain sight.

This isn't meant to make you paranoid. It's meant to make you informed. Because with a few simple precautions — most of which take less than a minute — you can dramatically reduce your risk and protect your family from infections that range from mildly unpleasant to genuinely dangerous.

Here are five common foods that can harbor parasites, the specific organisms they carry, and exactly what to do about each one.

### **1. Raw or Undercooked Fish (Sushi, Sashimi, Ceviche) — Anisakis Worms**

#### **The Parasite**

*Anisakis simplex* is a nematode (roundworm) that lives naturally in the gastrointestinal tracts of marine mammals like whales, dolphins, and seals. Its larvae infect fish and squid, where they coil up in the flesh and visceral cavity, waiting to be eaten by the next host in the food chain. When humans eat raw or undercooked infected seafood, they become accidental hosts — and the larvae can burrow into the walls of the esophagus, stomach, or intestine.

## How Common Is It?

More common than you'd think. Using health insurance data from 2018–2019, researchers estimated the average annual incidence of anisakiasis in Japan to be nearly 20,000 cases. Japan accounts for the majority of reported cases because of the cultural prevalence of raw fish, but the problem is global and growing. Anisakidosis is still significantly underreported and misdiagnosed globally, making it a disease of rising public health concerns as raw fish consumption increases worldwide. Japan, Spain, South Korea, Italy, and the United States have the highest rates of reported cases.

The species most commonly found in sushi-grade fish include salmon, mackerel, squid, herring, and anchovies. A case published in 2023 documented a 19-year-old college student in the U.S. who coughed up a live *Anisakis* worm two days after eating raw salmon sushi (SHM Abstracts, 2023).

## What It Does to You

Symptoms typically appear within hours of eating infected fish. They include sudden, severe abdominal pain, nausea, and vomiting. Some people experience a tingling sensation during or after eating raw or undercooked fish or squid — this is actually the worm moving in the mouth or throat. In some cases, the larvae burrow into the intestinal wall and cause an intense inflammatory reaction one to two weeks later, which can mimic appendicitis or Crohn's disease. Some individuals also develop allergic reactions, including hives and even anaphylaxis.

## How to Protect Yourself

The FDA recommends cooking seafood to an internal temperature of at least 145°F (63°C) to kill parasites. For raw preparations, proper freezing is the key.

Commercial sushi in the U.S. is required to be frozen before serving, which kills *Anisakis* larvae. The FDA-recommended freezing protocols include holding fish at -4°F (-20°C) for 7 days, or at -31°F (-35°C) until solid and then storing at that temperature for 15 hours. If you buy fish to prepare raw at home, make sure it has been commercially frozen to these specifications — your home freezer may not get cold enough. When in doubt, cook it.



## 2. Undercooked Pork and Beef — Tapeworms (*Taenia solium* and *Taenia saginata*)

### The Parasite

Tapeworms are among the oldest known human parasites, and two species are directly linked to the meat we eat. *Taenia solium* (the pork tapeworm) infects pigs, and *Taenia saginata* (the beef tapeworm) infects cattle. When humans eat raw or undercooked meat containing tapeworm larvae (called cysticerci), the larvae attach to the small intestine and develop into adult tapeworms — which can grow remarkably large. A tapeworm can grow to longer than 12 feet and can live for years. The beef tapeworm can reach up to 25 meters (over 80 feet).

## Why It Matters — Especially the Pork Tapeworm

While the beef tapeworm causes mostly mild digestive symptoms, the pork tapeworm carries a far more serious risk. Infection with *T. solium* tapeworms can result in human cysticercosis, which can be a very serious disease that can cause seizures and muscle or eye damage. Cysticercosis occurs when tapeworm eggs (rather than larvae) are ingested — often through contaminated food handled by someone carrying the adult tapeworm. When these eggs hatch, the larvae can migrate to the brain, eyes, muscles, or heart, forming cysts. Neurocysticercosis — cysts in the brain — is a leading cause of acquired epilepsy worldwide.

The WHO estimates that approximately 50 million people are infected with tapeworms globally, and about 50,000 die of cysticercosis annually. In the United States, *T. solium* taeniasis is seen primarily among Latin American immigrants, though domestically acquired cases do occur.

### How to Protect Yourself

Cook all pork to an internal temperature of at least 145°F (63°C) for whole cuts, and 160°F (71°C) for ground pork. Cook ground beef to 160°F (71°C). Use a meat thermometer — color alone is not a reliable indicator of doneness. Avoid tasting raw meat mixtures.

If you hunt your own game, the same temperature guidelines apply. Freezing pork at 5°F (-15°C) for 20 days also kills tapeworm cysticerci, though this is less reliable for beef.

Equally important: wash your hands thoroughly with soap and water after using the bathroom and before handling food. Because cysticercosis spreads through the fecal-oral route, good hygiene — particularly in households and food service — is a critical barrier.



## 3. Unwashed Leafy Greens and Fresh Produce — Cyclospora, Cryptosporidium, Toxoplasma, and Others

### The Parasites

This is the one that surprises most people. Fresh salad greens, herbs, and raw vegetables can carry multiple parasitic organisms, including *Cyclospora caytanensis*, *Cryptosporidium*, *Giardia*, and *Toxoplasma gondii*.

These parasites arrive on produce through contaminated irrigation water, animal manure used as fertilizer, infected food handlers, or soil contamination.

A Canadian study that tested 544 packages of precut salads and leafy greens purchased at retail stores found *Cryptosporidium* in 5.9 percent of samples, *Giardia* in 1.8 percent, and *Cyclospora* in 1.7 percent (Dixon et al., PubMed, 2013). A Spanish study of organic leafy vegetables and strawberries found *Toxoplasma gondii* DNA in 37.2 percent of samples — the most prevalent parasitic protozoa detected (PMC, 2023).

### The Outbreak History

*Cyclospora* outbreaks from fresh produce are a recurring problem in the United States. Past outbreaks have been associated with various types of imported fresh produce, including basil, cilantro, and raspberries. In 2018, two large multistate outbreaks sickened more than 761 people — one linked to prepackaged vegetable trays and another to fast-food restaurant salads. The 2023 and 2024 outbreak seasons involved more than 3,000 cases combined (Food Safety Magazine, 2025).

*Toxoplasma gondii* is particularly concerning. It is ranked as the third most important contributor to the global health burden from foodborne illness.

While most healthy adults who become infected show no symptoms, *Toxoplasma* poses serious risks for pregnant women (it can cause miscarriage, stillbirth, or birth defects) and immunocompromised individuals.

### **How to Protect Yourself**

Wash all produce thoroughly under running water before eating, even if it's labeled "pre-washed." Use a dedicated produce brush for firm-skinned vegetables. For leafy greens, separate the leaves and rinse each one individually. A solution of water with a small amount of white vinegar (roughly 1 part vinegar to 3 parts water) can help reduce surface contamination, though it won't eliminate all parasites.

Grow your own produce when possible, and avoid using raw animal manure as fertilizer (composted manure that has reached high temperatures is much safer). If you're pregnant or immunocompromised, be especially cautious with raw salads and unwashed herbs, and consider cooking vegetables when the source is uncertain.



## **4. Fresh Berries — Cyclospora and Toxoplasma**

### **The Parasites**

Berries deserve their own entry because their delicate, textured surfaces are particularly effective at trapping parasitic cysts and oocysts — and because they are almost always eaten raw.

Research has confirmed that *Toxoplasma gondii* oocysts can attach to and remain infectious on the surfaces of blueberries and raspberries (Kniel et al., 2002, referenced in PMC, 2020). A study published in *Parasites & Vectors* detected *T. gondii* oocysts in both vegetables and berry fruits purchased from local producers and supermarket suppliers (Lopes et al., PMC, 2020). The FAO/WHO comprehensive review on parasite contamination of berries noted that fresh produce items implicated in U.S. outbreaks include imported raspberries, which caused major *Cyclospora* outbreaks in 1996 and 1997. The 1996 *Cyclospora* outbreak was initially (and incorrectly) blamed on California strawberries, costing U.S. growers an estimated \$16 million in losses before the true source — imported raspberries from Guatemala — was identified (FAO/WHO berry review, PMC, 2018).

### **Why Berries Are Higher Risk**

Unlike smooth-skinned fruits like apples or bananas, berries have porous, uneven surfaces with tiny folds and cavities where parasitic cysts can lodge. They cannot be peeled, and vigorous scrubbing damages them. They are also typically eaten raw and are often consumed by children, who are especially vulnerable to parasitic infections.

### **How to Protect Yourself**

Rinse all berries gently but thoroughly under running water before eating. Spread them in a single layer in a colander and let water flow over them for at least 30 seconds. A dilute vinegar soak (1 part white vinegar to 3 parts water for 5 minutes, then rinse) can help reduce parasite load, though no washing method eliminates 100 percent of surface contamination.

Know where your berries come from. Domestically grown berries from farms with good sanitation practices carry lower risk than some imported varieties.

If you're pregnant, consider cooking berries (in smoothies, baked goods, or sauces) rather than eating them raw during the high-risk season (spring and summer). Freezing berries does not reliably kill all parasites, though it reduces risk.

For homesteaders and gardeners who grow their own berries: avoid using untreated animal manure near berry patches, protect plants from contact with cat feces (a primary source of *Toxoplasma* oocysts in the environment), and wash everything before eating.



## 5. Unfiltered Tap Water — *Giardia lamblia*

### The Parasite

*Giardia duodenalis* (also called *G. lamblia* or *G. intestinalis*) is the most commonly identified parasite causing waterborne disease outbreaks in U.S. public water systems. It's a microscopic protozoan that forms hardy cysts capable of surviving in cold water for months and resisting standard chlorination levels.

### How Common Is It?

During 2012–2017, public health officials from 26 states reported 111 giardiasis outbreaks with 760 primary cases, 28 hospitalizations, and 48 emergency department visits. Among waterborne outbreaks, tap water systems — including both municipal systems and private wells — were one of the leading exposure sources. Ingestion of as few as 10 cysts can cause disease.

The risk is higher for people who rely on private wells, rural water systems, or older municipal infrastructure. Aging pipes, distribution system deficiencies, and proximity between water lines and sewer lines can all create vulnerabilities. Research presented at a CDC panel on waterborne diseases noted that pressure fluctuations in aging pipe systems can draw contaminated groundwater into distribution lines through small leaks — particularly when sewer lines run close to water pipes (CDC, 2001).

### What It Does to You

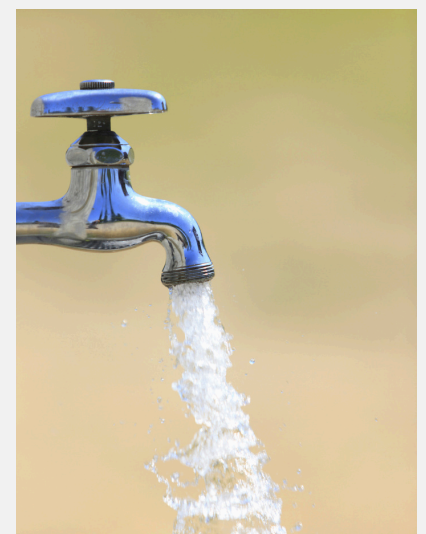
Giardiasis causes watery diarrhea, abdominal cramps, bloating, gas, nausea, and weight loss. About half of infections are asymptomatic, meaning you can carry and spread the parasite without knowing it. Symptoms can persist for weeks if untreated, and some people develop recurring symptoms or long-term digestive complications.

### How to Protect Yourself

If your home uses municipal water, your supply is treated and monitored to meet EPA standards — but treatment system failures do occur. If you have concerns about your water quality, a point-of-use filter rated to remove cysts (look for NSF/ANSI Standard 53 or 58 certification, or filters with an absolute pore size of 1 micron or smaller) provides an extra layer of protection.

If your home uses a private well, have your water tested at least annually, especially if you live near agricultural land, septic systems, or surface water. Wells dug close to streams, ponds, or areas with wildlife activity (beavers, in particular, are known carriers) face higher contamination risk.

When camping, hiking, or traveling in areas without treated water, always filter, boil, or chemically treat water before drinking. Boiling for at least one minute (three minutes at elevations above 6,500 feet) kills *Giardia* cysts effectively.



## Natural Support for Digestive Health After Exposure

If you've experienced a parasitic infection, or if you suspect past exposure, supporting your gut health afterward is important. Parasitic infections can disrupt the balance of gut bacteria, damage the intestinal lining, and leave lingering digestive symptoms even after the infection is cleared.

While the following approaches are not treatments for active parasitic infections (see a doctor for that), they can support gut recovery:

- **Probiotics and fermented foods.** Reintroducing beneficial bacteria through yogurt, kefir, sauerkraut, kimchi, and quality probiotic supplements can help restore microbial balance after infection.
- **Bone broth.** Rich in collagen, glycine, and glutamine, bone broth has been used traditionally to support intestinal lining repair. While clinical evidence is limited, the amino acid profile supports the tissue repair process.
- **Pumpkin seeds.** These have been used in folk medicine across many cultures as a natural antiparasitic. Some research supports the traditional use, particularly against tapeworms, though the evidence is preliminary and should not replace medical treatment.
- **Anti-inflammatory foods.** Turmeric, ginger, garlic, and omega-3-rich foods help reduce the gut inflammation that often persists after parasitic damage.
- **Digestive bitters and fiber.** Bitter herbs (dandelion root, gentian) stimulate digestive secretion, and adequate fiber supports the regular elimination that keeps the digestive tract moving.

## The Bottom Line: Knowledge Is the Best Protection

Parasites aren't exotic. They're in the sushi restaurant downtown, the salad mix at the supermarket, the undercooked burger at the backyard cookout, and – in some cases – the water running through your pipes. That doesn't mean you need to live in fear. It means you need to live with awareness.

The protective steps are simple and consistent: cook meat to proper temperatures, freeze fish before eating it raw, wash all produce thoroughly, know your water source, and practice good hand hygiene. These aren't complicated or expensive. They're just habits – and they work.

For families who are growing their own food, hunting their own game, or living on well water, the stakes are a little higher and the knowledge matters a little more. But the same principles apply: know the risks, take the precautions, and trust that informed, consistent action is the best medicine of all.

**Important Disclaimer:** This article is for educational purposes only. If you suspect you have a parasitic infection, consult a healthcare provider for proper diagnosis and treatment. Do not attempt to self-treat parasitic infections with home remedies.



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# 6 Medicinal Plants Every Homesteader Should Grow This Spring for a Complete Herbal First Aid Kit

*Grow, Harvest, and Use the Medicine Your Family Needs When Help Is Far Away.*

Spring is here. The soil is warming. The seed catalogs are stacked on the kitchen table, and you're sketching out beds for tomatoes, squash, and beans. But this year, we want you to add a different row to your garden plan — one that could matter more than any vegetable you'll ever grow.

This year, consider adding a different row of plants to your garden plan — one that could matter more than any vegetable you'll ever grow: medicinal plants.

We're talking about medicine.

Not the kind that comes in amber bottles with childproof caps.

We're talking about the kind that grows in the dirt, dries on a rack in your kitchen, and sits in mason jars on the shelf — ready when the nearest urgent care is forty minutes away, or when the roads are impassable, or when the supply chain that stocks your local pharmacy simply isn't there.

Medicinal plants can be grown right in your backyard, providing natural remedies that are both effective and easily accessible.

If you're a homesteader, you already understand something most people don't: self-reliance isn't a hobby. It's a way of life. You grow your own food. You fix what breaks. You plan ahead. But when it comes to health, too many self-sufficient families still depend entirely on a system they can't control.

This article is your invitation to change that — starting this spring, starting with six plants, and starting with the confidence that comes from knowing what the science actually says.

**Why Every Homestead Needs an Herbal First Aid Kit.**

Most homesteaders live at a distance from emergency services. Whether you're twenty miles from town or two hundred, you know that help isn't always fast. A child steps on a nail in the barn. Someone burns a hand on the wood stove. A deep cough settles into a family member's chest in January and doesn't leave. A stomach bug sweeps through the household.

These aren't exotic scenarios. They're Tuesday.

Understanding how to use these medicinal plants can empower you to take control of your family's health.

Modern medicine is extraordinary, and nothing in this article is meant to replace it. But there is a vast middle ground between "call 911" and "tough it out," and that middle ground is where herbal medicine has served families for thousands of years. The science behind many traditional remedies is stronger than most people realize — and growing these plants yourself is far simpler than you might think.

Many of these plants have been used for centuries, and their benefits are becoming increasingly supported by modern science.

The goal isn't to become a doctor. The goal is to become the kind of person who has options.

## **The Spring Planting Strategy: Start With Six**

If you're new to medicinal herbs, the temptation is to order thirty varieties and end up overwhelmed. Don't. Start with six plants that cover the most common needs on a homestead: wound care, immune support, digestive trouble, pain and inflammation, respiratory issues, and calming the nervous system. You can expand from there in future seasons.

Here are the six we recommend, along with what the research says, how to grow them this spring, and how to use them.

### **1. Plantain (*Plantago major*) — The Wound Healer That's Already in Your Yard**

Plantain is just one of the many plants that can be utilized for its healing properties.



#### **What It Does**

Plantain — the broad-leafed "weed," not the banana — may be the single most useful plant in a homesteader's first aid kit. It has been used across Europe, Asia, and the Americas for centuries as a go-to remedy for cuts, burns, stings, and bites. Native Americans called it "white man's footprint" because it seemed to appear wherever European settlers went.

Modern science has begun to validate what traditional healers have long known. A 2022 clinical study published in the *International Journal of Clinical Practice* found that a plantain-based ointment performed comparably to silver sulfadiazine — the standard medical treatment — for second-degree burn wounds, demonstrating wound-healing, analgesic, and antimicrobial properties (Keshavarzi et al., 2022).

A 2024 randomized clinical trial in the *Journal of Wound, Ostomy and Continence Nursing* showed that patients treated with plantain extract gel experienced significantly greater wound size reduction after one week compared to standard care alone (Ghanadian et al., 2024).

The plant contains bioactive compounds including flavonoids, terpenoids, and a polyphenolic compound called plantamajoside, which research suggests is responsible for much of its anti-inflammatory and tissue-repair activity (PMC, 2023).

### How to Grow It This Spring

Here's the beautiful secret: you probably already have it. Plantain grows wild in lawns, along driveways, in garden paths, and at the edges of fields across nearly every climate zone in North America. Rather than pulling it, encourage it. Designate a patch where you let it grow freely.

If you want to cultivate it intentionally, scatter seeds in early spring in a partly shaded area with moist soil. Plantain is not picky. It germinates easily and tolerates foot traffic, poor soil, and neglect. It's a perennial, so once established, it returns year after year.

**Harvest:** Pick the large, healthy leaves throughout the growing season. Use fresh for poultices, or dry on a screen in a well-ventilated area out of direct sunlight. Store dried leaves in airtight glass jars for up to one year.

### How to Use It

- **Fresh poultice for stings, bites, and minor cuts:** Chew or crush a fresh leaf until the juices release, then press directly onto the affected area. Replace every 30 minutes.

- **Dried leaf tea for digestive support:** Steep 1–2 teaspoons of dried leaf in hot water for 10 minutes. Plantain has a mild, slightly earthy flavor and has been traditionally used to soothe an irritated stomach.

- **Infused oil for burns and skin irritation:** Pack dried leaves into a jar, cover with olive oil, and let sit in a warm place for 4–6 weeks. Strain. Apply topically.

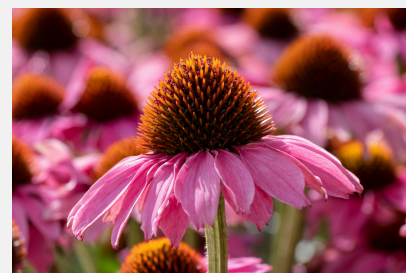


## 2. Echinacea (Echinacea purpurea) – The Immune System's Ally

### What It Does

Echinacea is one of the most extensively studied medicinal herbs in the world, and it belongs in every homestead medicine garden. Native to North America, it was widely used by Indigenous peoples long before European contact and has been the subject of hundreds of scientific investigations.

Knowing how to cultivate and use these plants can significantly enhance your home health practices.



A comprehensive 2024 review published in *Antibiotics* (MDPI) examined the existing body of preclinical research and found that echinacea's key bioactive compounds — alkamides, caffeic acid derivatives, flavonoids, and polysaccharides — enhance the activity of macrophages and natural killer cells, stimulate cytokine production, and demonstrate both antibacterial and antiviral properties against respiratory pathogens including *Streptococcus pneumoniae* and influenza (Ahmadi et al., 2024).

A systematic review of 26 controlled clinical trials found that the majority showed echinacea preparations to be effective immunomodulators, though the authors noted that variability in preparations makes standardized dosing recommendations difficult (Melchart et al., 1994). Clinical reviews have also concluded that echinacea appears to shorten the duration and severity of colds and upper respiratory infections when taken at the onset of symptoms (Block & Mead, 2003).

The evidence is real, though it comes with an honest caveat: results vary depending on the species used,

the plant part, and the preparation method. This is not a magic bullet — it's a well-supported tool.

### How to Grow It This Spring

Echinacea is a hardy perennial that thrives in USDA zones 3–9. It prefers full sun and well-drained soil but tolerates partial shade and a range of soil conditions.

Starting from seed: Echinacea seeds benefit from cold stratification. If you haven't already started them indoors, you can direct-sow in early spring (as soon as the soil can be worked) and let nature provide the cold treatment. Press seeds lightly into the soil surface — they need light to germinate. Expect germination in 10–20 days once soil temperatures reach 65–70°F. Note that plants grown from seed typically don't flower until their second year.

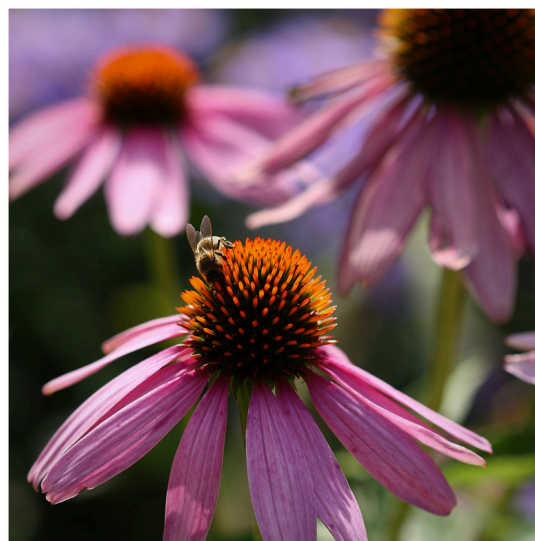
Starting from transplants: For first-year flowers and faster medicine, buy established plants from a nursery and transplant after your last frost date. Space 18–24 inches apart.

**Harvest:** Harvest flowers and leaves when the plant is in full bloom (typically mid-summer). Roots are most potent and are best harvested in the fall of the plant's third year or later. Dry all parts thoroughly before storage.

### How to Use It

- **Tincture (most traditional preparation):** Fill a jar one-third full with dried echinacea root (or half full with fresh root), cover with 80-proof vodka, seal, and shake daily for 4–6 weeks. Strain. Take 1–2 dropperfuls at the first sign of a cold, up to 3 times daily for 7–10 days.
- **Tea for immune support:** Steep 1–2 teaspoons of dried flowers and leaves in boiling water for 15 minutes. Drink 2–3 cups daily during illness.

**Note:** Echinacea is generally considered safe for short-term use. Individuals with autoimmune conditions should consult a healthcare provider before use, as it modulates immune function.



### 3. Calendula (*Calendula officinalis*) — The Skin Repair Specialist

Calendula is another excellent plant to include in your herbal first aid kit for its remarkable skin healing abilities.

#### What It Does

If plantain is your field medic for acute injuries, calendula is your long-term skin care specialist. Also known as pot marigold, calendula has been used in traditional medicine systems across Europe and Asia for wound healing, inflammation, and skin conditions.

A 2019 systematic review in the *Journal of Wound Care* evaluated 14 studies (7 animal experiments, 7 clinical trials) and found evidence that calendula extract promoted faster resolution of the inflammation phase of wound healing and increased the production of granulation tissue — the new connective tissue that rebuilds damaged skin (Leach, 2019).

Animal studies demonstrated a protective effect when calendula was applied before burn injury. Research has also documented its anti-inflammatory, antioxidant, and antimicrobial properties, making it useful as a broad-spectrum topical remedy (Sapkota & Kunwar, 2024).



### How to Grow It This Spring

Calendula is one of the easiest medicinal herbs to grow, and it's a perfect choice for beginners. It's a cool-season annual that can be direct-sown outdoors in early spring, even before your last frost — it can handle light frost without damage.

**Planting:** Sow seeds directly into garden soil or containers in early to mid-spring. Plant seeds  $\frac{1}{4}$  inch deep, spaced 8–12 inches apart, in full sun to partial shade. Germination takes 5–14 days. Calendula prefers cooler weather and may slow down in the heat of midsummer but will often rebound in fall. In warmer climates (like South Florida), it can be grown as a fall and winter annual.

**Harvest:** Pick the flower heads when they are fully open, ideally in the morning after the dew has dried. The more you harvest, the more the plant produces. Dry flowers on a screen in a shaded, well-ventilated area. Store in airtight jars away from light.

### How to Use It

- **Calendula salve (a homestead essential):** Infuse dried calendula flowers in olive oil for 4–6 weeks (or use the warm method: gently heat in a double boiler for 2–3 hours). Strain, then melt in beeswax at a ratio of approximately 1 ounce beeswax per 8 ounces of infused oil. Pour into tins. This salve is useful for minor cuts, scrapes, dry skin, rashes, and chapped hands — all daily realities on a working homestead.
- **Wound wash:** Brew a strong tea from dried flowers and allow to cool. Use to gently cleanse minor wounds.
- **Sitz bath:** Add a strong calendula infusion to warm bath water for postpartum recovery or hemorrhoid relief — a use supported by its traditional application as an anti-inflammatory for mucous membranes.



## 4. Yarrow (*Achillea millefolium*) — The Bleeding Stopper

### What It Does

Yarrow's botanical name comes from the Greek hero Achilles, who legend says used the plant to treat his soldiers' wounds on the battlefield. That reputation has persisted for millennia — and for good reason.



Yarrow is yet another versatile plant that can help in managing wounds and inflammation.

A review published in the Indian Journal of Pharmaceutical Sciences examined the pharmacological activities of yarrow species and confirmed its traditional uses for wound healing, fever reduction, digestive problems, and anti-inflammatory applications. The German Commission E — a scientific advisory board that evaluates herbal medicines — approves yarrow for internal use in cases of appetite loss and digestive complaints, and for external use in treating slow-healing wounds, skin inflammation, and bacterial or fungal infections (Ali et al., 2017).

Yarrow contains compounds with hemostatic (bleeding-stopping), antimicrobial, anti-spasmodic, and diaphoretic (fever-reducing) properties, making it arguably the most important first-response herb a homesteader can have on hand.

### How to Grow It This Spring

Yarrow is an extremely hardy perennial (zones 3–9) that thrives in full sun and well-drained to sandy soil. It is drought-tolerant once established and requires almost no maintenance.

**Planting:** Sow seeds indoors 8–10 weeks before your last frost, or direct-sow outdoors in early to mid-spring. Seeds are tiny — press them onto the soil surface and keep moist. Germination takes 14–21 days. You can also divide established plants in spring. Yarrow spreads readily, so give it room or contain it in a dedicated bed.

**Harvest:** Cut the flowering stems when blooms are fully open, typically mid to late summer. Hang in bundles upside down to dry. The leaves, stems, and flowers are all medicinal. Store in airtight containers for up to one year.

### How to Use It

- **Emergency wound care:** Crush fresh yarrow leaves and flowers and press them firmly onto a bleeding wound. Yarrow is one of the most respected hemostatic herbs in the Western herbal tradition and has been used for centuries to help slow bleeding while getting to professional care.
- **Fever tea:** Steep 1–2 teaspoons of dried yarrow flowers in boiling water for 10–15 minutes. Yarrow is a diaphoretic, meaning it promotes sweating, which has been traditionally used to help break a fever. Drink warm.

- **Digestive bitter:** A small cup of yarrow tea before meals has been traditionally used to stimulate appetite and ease digestive discomfort.
- **Note:** Yarrow should be avoided during pregnancy. Those with allergies to plants in the Asteraceae family (ragweed, daisies, chrysanthemums) should use caution.



## 5. Chamomile (*Matricaria chamomilla*) — The Calming Healer

### What It Does

Chamomile is one of the world's most widely consumed medicinal herbs, and its gentle effectiveness makes it especially valuable in a family first aid kit — particularly when children are involved.



A 2016 systematic review published in *Electronic Physician* examined 69 studies and found that chamomile has documented antioxidant, antimicrobial, anti-inflammatory, antidiarrheal, and antidiabetic properties (Miraj & Alesaeidi, 2016). A 2023 narrative review in the *Asian Journal of Surgery* concluded that chamomile may help with six common health concerns: anxiety and depression, sleep problems, gastrointestinal dysfunction, acute and chronic pain, nausea and vomiting, and blood sugar management (2023).

The National Center for Complementary and Integrative Health (NCCIH) notes preliminary evidence that chamomile may help with generalized anxiety disorder and states that it is generally considered safe for most adults when consumed as tea or taken as a supplement short-term.

Chamomile is among the most beloved plants for its soothing properties, making it ideal for your home remedy collection. For homesteaders with young children, chamomile is invaluable: it's mild enough for kids, pleasant tasting, and addresses the most common childhood complaints — upset stomachs, trouble sleeping, and anxiety.

### How to Grow It This Spring

Chamomile is a cheerful, low-growing annual (German chamomile) or perennial (Roman chamomile) that thrives in full sun.

German chamomile is preferred for medicinal use.

**Planting:** Direct-sow seeds outdoors after the last spring frost. Scatter seeds on the soil surface and press lightly — chamomile seeds need light to germinate. Keep the soil moist. Germination takes 10–14 days. Chamomile doesn't like competition, so keep the area weeded. The plant self-sows readily, so one planting often gives you chamomile for years.

**Harvest:** Pick the flower heads when they are fully open and the white petals begin to bend slightly backward. Harvest frequently to encourage continued blooming. Dry quickly in a single layer on a screen in a warm, airy location.

### How to Use It

- **Calming tea:** Steep 1 tablespoon of dried flowers in hot water for 5–10 minutes. Drink before bed for sleep support, or throughout the day for digestive ease or mild anxiety.
- **Chamomile compress:** Brew a strong tea, soak a clean cloth, and apply to irritated skin, minor rashes, or puffy eyes.
- **Children's tummy tea:** A weak chamomile tea (half strength) has been used traditionally to soothe children's stomach upset. Serve lukewarm.

**Note:** Individuals allergic to ragweed, chrysanthemums, or daisies may react to chamomile. Introduce cautiously.



## 6. Peppermint (*Mentha × piperita*) — The Digestive Powerhouse and Respiratory Opener

### What It Does

Peppermint is a medicinal herb with a deep evidence base, particularly for digestive and respiratory complaints. Its active compound, menthol, has well-documented antispasmodic, analgesic, and decongestant properties.



Multiple clinical trials and meta-analyses have supported peppermint oil's effectiveness for irritable bowel syndrome (IBS) symptoms, making it one of the most evidence-backed herbal remedies in gastroenterology. Peppermint's ability to relax smooth muscle in the gastrointestinal tract is well-established in pharmacological literature. Topically, menthol provides a cooling sensation that has been used for headache relief, and the vapor from peppermint tea or steam inhalation has long served as a natural decongestant for stuffy noses and chest congestion.

For homesteaders, peppermint fills a critical niche: it addresses the everyday complaints — headaches, nausea, indigestion, congestion — that aren't emergencies but make it hard to get through a day of chores.

Peppermint is a delightful plant that can provide relief for digestive and respiratory issues, making it a must-have.

### How to Grow It This Spring

Peppermint is a vigorous, spreading perennial (zones 3–11) that is virtually indestructible once established. Fair warning: it will take over your garden if you let it. Grow it in containers or in a dedicated bed with barriers.

**Planting:** Peppermint is best propagated from transplants, divisions, or cuttings rather than seed (seeds are unreliable and produce variable plants). Plant divisions or nursery starts outdoors in spring after the last frost. It prefers moist soil and partial to full sun.

**Harvest:** Cut stems throughout the growing season, harvesting just before the plant flowers for the highest menthol concentration. Hang in small bundles to dry, or strip leaves and dry on screens. Peppermint retains its potency well when stored in airtight jars.

### How to Use It

- **Digestive tea:** Steep a generous handful of fresh leaves (or 1–2 teaspoons dried) in boiling water for 5–10 minutes. Drink after meals for bloating, gas, or nausea.
- **Steam inhalation for congestion:** Add a handful of fresh or dried leaves to a bowl of just-boiled water. Drape a towel over your head and breathe the steam for 5–10 minutes.
- **Headache relief:** Apply diluted peppermint essential oil (or simply crush fresh leaves) to the temples and back of the neck.
- **Note:** Peppermint may worsen acid reflux in some individuals. It should not be used on the faces of infants or very young children, as concentrated menthol can cause breathing difficulties.



### Drying, Storing, and Preserving Your Herbal Medicine

By drying and preserving these plants, you ensure their availability for future use throughout the year.

Growing the herbs is only half the work. To have medicine on the shelf in January, you need to preserve your summer harvest properly.

**Drying** is the simplest preservation method. Harvest herbs on a dry morning after the dew has lifted but before the heat of the day. Hang bundles upside down in a warm, dry, well-ventilated space out of direct sunlight — an attic, covered porch, or pantry works well. Alternatively, spread leaves and flowers in a single layer on drying screens. Most herbs dry in 3–7 days depending on humidity. They're ready when they crumble easily between your fingers.

**Storage** matters. Keep dried herbs in labeled, airtight glass jars (mason jars are perfect) in a cool, dark place. Properly stored, most dried herbs maintain their potency for 6–12 months. Roots and bark may last up to two years.

**Tinctures** extend shelf life dramatically. Alcohol-based tinctures (using 80-proof vodka or brandy) can last 3–5 years or more. They're also the most concentrated way to take herbal medicine. The basic method: fill a jar one-third full with dried herb (or half full with fresh), cover completely with alcohol, seal tightly, shake daily for 4–6 weeks, then strain through cheesecloth and store in dark glass dropper bottles.

**Infused oils** (for salves and topical use) are made by covering dried herbs with a carrier oil like olive oil and allowing them to sit for 4–6 weeks, shaking occasionally. Strain and store in dark glass. Adding beeswax creates a salve.

## Your Spring Planting Calendar at a Glance

Herb	When to Plant	Sun	Soil	Zones	First Harvest
Plantain	Early spring (or encourage existing wild plants)	Part shade to full sun	Any — tolerates poor soil	3–12	Same season
Echinacea	Start seeds indoors 8–10 wks before last frost, or transplant after last frost	Full sun	Well-drained	3–9	Year 2 from seed; Year 1 from transplant
Calendula	Direct sow early spring (tolerates light frost)	Full sun to part shade	Average, well-drained	2–11 (annual)	8–10 weeks from sowing
Yarrow	Start indoors 8–10 wks before last frost, or direct sow mid-spring	Full sun	Well-drained, sandy OK	3–9	Year 2 from seed; Year 1 from transplant
Chamomile	Direct sow after last frost	Full sun	Average, well-drained	3–9	10–12 weeks from sowing
Peppermint	Transplant divisions or starts after last frost	Part shade to full sun	Moist, rich	3–11	Same season

## Building Your Kit: What to Have on the Shelf

Once you've grown, harvested, and preserved your first season of medicinal herbs, you'll want to organize them into an actual first aid kit. Here's what a well-stocked homestead herbal medicine shelf might look like:

Make sure to have an assortment of dried plants on hand to address a variety of health concerns.

- **Dried plantain leaf** — for teas, poultices, and infused oil
- **Echinacea tincture** — for immune support at the first sign of illness
- **Calendula salve** — for daily skin care, cuts, burns, and rashes
- **Dried yarrow flowers and leaf** — for wound care and fever tea
- **Dried chamomile flowers** — for calming tea, digestive support, and compresses
- **Dried peppermint leaf** — for digestive tea, steam inhalation, and headache relief
- **Raw honey (local if possible)** — a natural wound dressing and sore throat remedy
- **Apple cider vinegar** — for digestive support, as a hair rinse, and as a base for herbal preparations
- **Olive oil and beeswax** — for making salves and infused oils
- **Clean muslin cloth, cheesecloth, and dark glass bottles** — for preparations and storage

This isn't a replacement for a conventional first aid kit (keep your bandages, antiseptic, and pain relievers too). It's a complement — the natural layer that extends your family's ability to handle the everyday health challenges of homestead life.

## **A Final Thought: The Garden as Pharmacy**

There's something deeply right about growing your own medicine. It connects you to the same knowledge that sustained your great-grandparents and their great-grandparents before them. It gives you agency. It gives you options.

Growing your own medicinal plants not only connects you to history but also empowers you to take charge of your health.

But it also requires humility. Herbal medicine is powerful, and it is real — but it has limits. A yarrow poultice is not a substitute for stitches on a deep laceration. Echinacea tea is not a replacement for antibiotics when someone has pneumonia. Know when to use your herbs, and know when to get in the truck and drive to the hospital.

The wisest homesteaders hold both truths at once: self-reliance and the willingness to seek help. Your herbal first aid kit is one more tool in the toolbox — one that you grew yourself, from your own soil, in your own garden, with your own hands.

Start this spring. Start with six plants. And by this time next year, your medicine shelf will tell a story of independence, knowledge, and care for the people you love most.

Start today by incorporating these plants into your life and create a sustainable health practice.

**Important Disclaimer:** The information in this article is for educational purposes only and is not a substitute for professional medical advice, diagnosis, or treatment. Always consult a qualified healthcare provider before using herbal remedies, especially if you are pregnant, nursing, taking medications, or managing a chronic health condition. In a medical emergency, call 911 or go to the nearest emergency room.



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# 7 Natural Sleep Remedies That Actually Work (According to Science)

## *What to Try Tonight — and What the Research Really Says About Each One*

You did everything right today. You worked hard, ate well, took care of your family. Now it's 11:30 at night, and you're staring at the ceiling.

Your body is exhausted. Your mind won't stop. You keep checking the clock — midnight, 12:45, 1:20 — doing the math on how few hours you'll get before the alarm. And somewhere in the back of your mind, you know that tomorrow you'll be foggy, irritable, and running on caffeine and willpower.

You are far from alone. Research suggests that roughly one-third of the global population reports dissatisfaction with their sleep,

and between 6 and 15 percent meet the clinical criteria for an insomnia disorder (Kocevska et al., 2021). The consequences go far beyond tiredness. Poor sleep has been linked to increased risk of heart disease, type 2 diabetes, obesity, weakened immune function, and cognitive decline. It affects your mood, your relationships, your ability to make decisions, and — if you're a person of faith — even your capacity to be spiritually present and emotionally available to the people who need you.

So what do you do about it?

Many people reach for over-the-counter antihistamines or eventually ask their doctor for a prescription.

Those options have their place, but they also come with real concerns. The Mayo Clinic notes that tolerance to antihistamine sleep aids develops quickly, meaning they become less effective the longer you use them, and they frequently cause next-day grogginess (Mayo Clinic, 2026). Prescription sleep medications carry risks of dependence and side effects that make many people uncomfortable.

There is another path. A growing body of clinical research supports several natural remedies — herbs, minerals, amino acids, and behavioral practices — that can genuinely improve sleep quality without the risks of pharmaceutical sleep aids. Not all of them work equally well, and not all of the evidence is ironclad.

But the best options are backed by randomized controlled trials, systematic reviews, and decades of real-world use.

Here are seven worth knowing about — and the honest truth about what the science says for each one.

## 1. Magnesium — The Mineral Most People Are Missing

If you try only one thing on this list, make it magnesium.

Roughly half of the U.S. population does not consume the recommended daily dietary amount of magnesium, and about 30 percent of the global population has inadequate intake (Passarelli et al., 2024). That matters for sleep because magnesium plays a direct role in the biochemistry of rest. It acts as a natural relaxant for the nervous system, functioning as an agonist of GABA (the brain's primary calming neurotransmitter) and as an antagonist of NMDA receptors (which, when overactive, keep the brain in a wired, alert state). Magnesium also supports the production of melatonin and helps regulate cortisol, the stress hormone that can keep you awake.



## What the research shows about magnesium

A double-blind, placebo-controlled clinical trial in older adults found that 500 mg of magnesium daily for eight weeks led to statistically significant improvements in sleep time, sleep efficiency, and melatonin levels, along with significant decreases in cortisol and insomnia severity compared to placebo (Abbasi et al., 2012).

A 2021 systematic review and meta-analysis found that magnesium supplementation reduced the time it took to fall asleep by an average of more than 17 minutes compared to placebo (Mah & Pitre, 2021).

A 2024 randomized controlled trial found that magnesium L-threonate specifically improved sleep quality, deep and REM sleep stages, and daytime mood and energy (Hausenblas et al., 2024). And a 2025 trial of 155 adults found that magnesium bisglycinate produced greater reductions in insomnia severity scores compared to placebo by week four (published in *Nature: Sleep*).

## How to use magnesium

Take 200–400 mg of elemental magnesium in the evening, about 30–60 minutes before bed. Magnesium glycinate (also called bisglycinate) and magnesium L-threonate are the forms most studied for sleep and are generally well-tolerated. Magnesium citrate also works but is more likely to cause loose stools. Avoid magnesium oxide for sleep purposes — it's poorly absorbed.

You can also increase magnesium through food: dark leafy greens, pumpkin seeds, almonds, black beans, avocado, and dark chocolate are all rich sources.

## The honest caveat about magnesium

The overall quality of evidence is still considered moderate. Most studies have been small, and optimal dosing hasn't been firmly established. But given magnesium's safety profile, low cost, and wide availability, it's one of the most practical starting points.

## 2. Valerian Root — The Ancient Sleep Herb With Modern Evidence

Valerian (*Valeriana officinalis*) has been used as a sleep aid for hundreds of years across European and Asian herbal traditions. It remains one of the most studied herbal sleep remedies in the scientific literature.

### What the research shows about valerian root

A comprehensive literature review published in 2024 in *Cureus* concluded that valerian, along with hops and melatonin, showed the most promising evidence for improving sleep quality and reducing insomnia symptoms among all herbal and natural supplements studied. The proposed mechanism involves modulation of GABA neurotransmitter systems (Herbal and Natural Supplements for Improving Sleep, PMC, 2024).

A 2025 scoping review of 51 randomized controlled trials published in *Sleep Medicine* identified valerian and melatonin as the two most well-studied over-the-counter products, noting that both appear safe and that most studies demonstrated positive effects on insomnia symptoms (*Sleep Medicine*, 2025).

A 2024 umbrella review in *European Neuropsychopharmacology* also examined the cumulative evidence and found valerian to be among the most frequently validated herbal options.

Valerian appears to work best for people with mild to moderate sleep difficulties. It is not a sedative in the pharmaceutical sense — you won't feel knocked out. Instead, most users describe a gradual improvement in sleep quality over one to two weeks of consistent use.



## How to use valerian root

Take 300–600 mg of valerian root extract about 30 minutes to two hours before bed. It can also be brewed as a tea from dried root (2–3 grams steeped in hot water for 10–15 minutes), though fair warning — valerian tea has a pungent, earthy taste that many people find unpleasant. Capsules or tinctures may be more practical.

### The honest caveat about valerian root

Results are inconsistent across studies, partly because valerian preparations vary widely in their chemical composition. Some people respond well; others notice little effect. Mild headaches and stomach upset have been reported occasionally. Valerian may interact with sedative medications and alcohol, so use caution if you take other sleep aids or anxiety medications.



### 3. Chamomile — Gentle, Safe, and Surprisingly Well-Studied

We covered chamomile in our recent article on the homesteader's herbal first aid kit, but its role as a sleep aid deserves its own spotlight. Chamomile (*Matricaria chamomilla*) is one of the most widely consumed herbal teas in the world, and its calming effects are more than folklore.

#### What the research shows about chamomile

The active compound in chamomile, an antioxidant called apigenin, binds to specific receptors in the brain that promote relaxation and reduce anxiety. A 2016 systematic review of 69 studies confirmed chamomile's anti-inflammatory, antimicrobial, and antianxiety properties (Miraj & Alesaeidi, 2016).

A 2015 study of 80 postnatal women found that those who drank chamomile tea daily for two weeks reported significantly better sleep quality than the control group. The NCCIH notes that preliminary research supports chamomile's potential benefit for generalized anxiety disorder, which is one of the most common drivers of insomnia.

Chamomile won't put you to sleep the way a pharmaceutical will. What it does is lower the background noise — the anxiety, the racing thoughts, the physical tension — that keeps you from falling asleep naturally.



### How to use chamomile

Steep 1–2 tablespoons of dried chamomile flowers (or a high-quality tea bag) in hot water for 5–10 minutes. Drink 30–60 minutes before bed. For stronger effects, some people take chamomile extract in capsule form (400–1,600 mg daily has been used in studies). Chamomile pairs beautifully with other calming herbs in a bedtime tea blend — lavender, lemon balm, and passionflower are all natural companions.

#### The honest caveat about chamomile

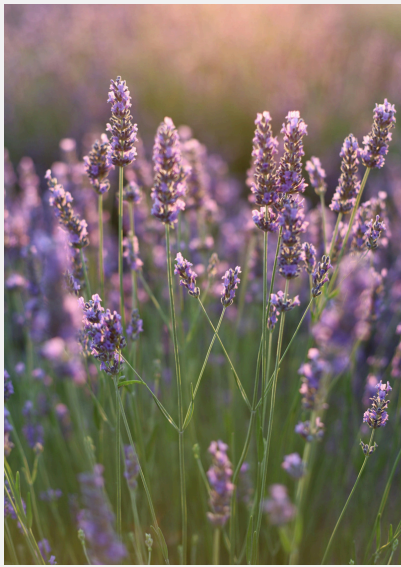
Chamomile is one of the safest herbs available, but people with allergies to ragweed, daisies, or chrysanthemums should introduce it cautiously. It may have mild estrogen-like effects, so speak with your doctor if you have a hormone-sensitive condition.

### 4. Lavender — The Scent That Changes Your Nervous System

Lavender is unique on this list because the most compelling evidence is for its use as aromatherapy — you don't even have to swallow anything.

#### What the research shows about lavender

Research has demonstrated that inhaling lavender essential oil slows heart rate, lowers blood pressure, and reduces skin temperature — all physiological shifts that prepare the body for sleep. A study found that participants who slept in a lavender-scented room experienced more restorative deep sleep than those who did not. A systematic review of plant extracts for sleep disturbances identified lavender as one of the two most frequently studied botanicals (along with valerian) and found its use associated with anxiolytic effects and improvements in both quality and duration of sleep (Guadagna et al., 2020).



Lavender's mechanism appears to involve modulation of the parasympathetic nervous system — the "rest and digest" branch that calms the body down. For people whose sleep problems are driven by anxiety, stress, or an inability to "switch off" at night, lavender may be particularly effective.

### How to use lavender

Place 3–5 drops of pure lavender essential oil in a bedside diffuser and run it for 20–30 minutes before and during the initial period of falling asleep. Alternatively, add a few drops to a cotton ball and tuck it inside your pillowcase. Lavender sachets placed under your pillow or a lavender-infused linen spray are also effective and simple.

Lavender is also available as an oral supplement (Silexan/Lavela is the most studied preparation, at 80 mg daily), which has shown anxiolytic effects comparable to low-dose benzodiazepines in some studies.

However, the aromatherapy route is gentler, cheaper, and carries virtually no risk.

### The honest caveat about lavender

Essential oils are potent. Use only pure, therapeutic-grade lavender oil and never apply undiluted oil directly to skin. Avoid ingesting essential oils unless using a product specifically designed for oral use. Some people find lavender's scent stimulating rather than calming — if that's you, try a different approach from this list.



## 5. Tart Cherry Juice — Melatonin From the Orchard

This one surprises most people. Tart cherries (specifically Montmorency cherries) are one of the few significant food sources of melatonin — the hormone your brain produces in response to darkness to signal that it's time to sleep.



### What the research shows about tart cherry juice

Early clinical research found that drinking tart cherry juice increased measurable melatonin levels in the body and helped participants sleep more soundly and for longer duration. The effect is attributed to both the melatonin content and the anti-inflammatory polyphenols in the cherries, which may reduce conditions that disrupt sleep. Importantly, common sweet cherry varieties (like Bing cherries) do not appear to have the same effect — the melatonin concentration is specific to tart varieties.

### How to use tart cherry juice

Drink 8 ounces of tart cherry juice (unsweetened, 100% juice) about an hour before bed. Some people prefer tart cherry concentrate mixed with water to reduce sugar intake. Tart cherry extract is also available in capsule form. Look for products that specify Montmorency cherries.

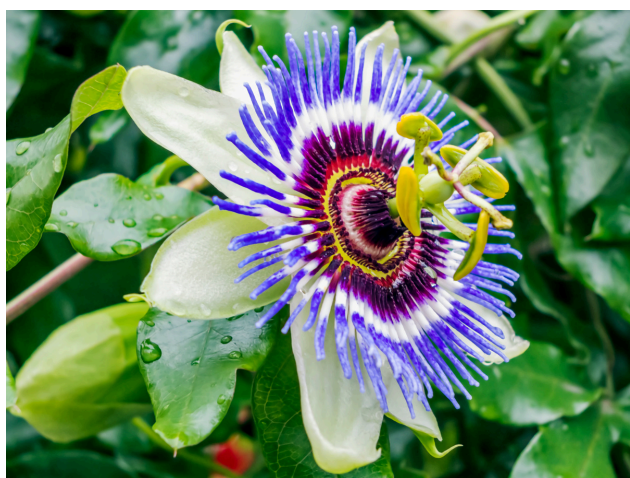
### The honest caveat about tart cherry juice

The evidence base is still small — a handful of studies with modest sample sizes. Tart cherry juice also contains natural sugars and calories, which may not suit everyone, particularly those managing blood sugar (a relevant concern for this site's diabetes-focused readers).

If blood sugar is a factor for you, the capsule form may be a better option. Consider this a supporting player, not a standalone solution.

## 6. Passionflower — The Underrated Nervine

Passionflower (*Passiflora incarnata*) doesn't get the attention of valerian or chamomile, but it has a quietly strong evidence profile and a long history of use in both Native American and European herbal traditions as a remedy for anxiety and sleeplessness.



### What the research shows about passionflower

A double-blind, placebo-controlled study published in *Phytotherapy Research* found that participants who drank passionflower tea daily for one week showed significantly better subjective sleep quality compared to the placebo group (Ngan et al., 2011). Passionflower appears to work by increasing levels of GABA in the brain, producing a calming effect without the grogginess that heavier sedative herbs can cause. The 2025 scoping review in *Sleep Medicine* included passionflower as a component in promising combination products alongside valerian and hops.

One of passionflower's greatest strengths is its gentleness. It's mild enough to be appropriate for most adults and has a pleasant, slightly floral taste as a tea.

## How to use passionflower

Brew passionflower tea by steeping 1–2 teaspoons of dried herb in boiling water for 10 minutes. Drink 30–60 minutes before bed. It's also available as a tincture (40–80 drops before bed) or in capsule form (typically 200–500 mg). Passionflower combines well with chamomile, valerian, and lemon balm in a bedtime tea blend.

### The honest caveat about passionflower

Most studies are small, and passionflower has been studied more often in combination with other herbs than as a standalone remedy. It may cause drowsiness — that's the point — so don't take it before driving. Avoid during pregnancy, as it may stimulate uterine contractions.

## 7. Sleep Hygiene — The Free Remedy That Makes Everything Else Work Better

This isn't a supplement, a tea, or an extract. It's a set of behavioral habits — and it may be more powerful than anything in a bottle.

Sleep researchers call these practices "sleep hygiene," and the evidence behind them is robust. Johns Hopkins Medicine, the Mayo Clinic, and the American Academy of Sleep Medicine all recommend sleep hygiene as a first-line approach to insomnia, often before any medication or supplement.

Here are the practices with the strongest evidence:

### Consistent sleep and wake times.

Go to bed and wake up at the same time every day — including weekends. This synchronizes your circadian rhythm, the internal clock that governs when your body produces melatonin and cortisol.

Irregular sleep schedules are one of the most common and most correctable causes of poor sleep.

### **Light management.**

Expose yourself to bright natural light in the morning (step outside for 10–15 minutes shortly after waking). This anchors your circadian clock. In the evening, dim the lights in your home and reduce blue light exposure from screens for at least 60 minutes before bed. Blue light from phones, tablets, and TVs directly suppresses melatonin production.

### **A cool, dark, quiet bedroom.**

Your body temperature needs to drop slightly to initiate sleep. Keep your bedroom between 60–67°F (15–19°C). Use blackout curtains or a sleep mask. If noise is an issue, a fan or white noise machine helps.

### **Exercise — but time it right.**

Regular physical activity improves deep sleep, but exercising within two hours of bedtime can be stimulating. Johns Hopkins sleep researchers note that aerobic exercise releases endorphins and raises core body temperature — both of which signal wakefulness. Morning or afternoon exercise is ideal.

### **A wind-down ritual.**

Give your nervous system a transition period. For 30–60 minutes before bed, step away from work, screens, and stressful conversations. Read something calming. Drink your chamomile tea. Pray, journal, or practice slow breathing. The content of the ritual matters less than its consistency — your brain learns to associate the routine with approaching sleep.

### **Limit caffeine after noon.**

Caffeine has a half-life of 5–6 hours, meaning half the caffeine from a 2 PM cup of coffee is still circulating in your bloodstream at 7 or 8 PM. Many people who "can't sleep" are actually still metabolizing afternoon caffeine.

### **The honest truth.**

Sleep hygiene alone won't cure severe insomnia. But without it, no supplement or medication will work as well as it should. Think of sleep hygiene as the foundation and the other remedies on this list as the finishing touches.

### **How to Combine These Remedies: A Practical Evening Protocol**

You don't need to use all seven of these at once. Here's a simple, layered approach you can customize:

### **The Foundation (start here):**

- Implement consistent sleep hygiene practices — especially consistent wake time and evening light reduction
- Take 200–400 mg of magnesium glycinate or L-threonate with your evening meal or 30–60 minutes before bed

### **Add One Herbal Ally (choose based on your primary issue):**

- Racing mind / anxiety keeping you awake: Chamomile or passionflower tea
- General difficulty falling asleep: Valerian root extract (capsule or tincture)
- Physical tension / can't relax: Lavender aromatherapy in the bedroom



## Optional Additions:

- Tart cherry juice (8 oz, an hour before bed) for additional melatonin support
- A written "brain dump" before bed – write tomorrow's to-do list on paper so your mind can release it

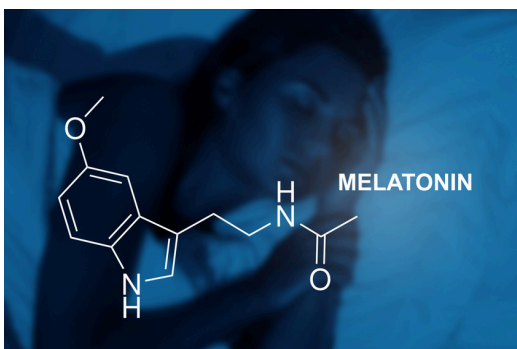
Give any new approach at least two weeks of consistent use before judging its effectiveness. Herbal remedies, in particular, tend to build in effect over time rather than working like a switch on the first night.

## A Word About Melatonin Supplements

You may have noticed that melatonin supplements are not featured as a standalone entry on this list, even though they are the most popular sleep supplement in America. That's intentional.

Melatonin is a genuine hormone, and supplemental melatonin does have evidence supporting its use for jet lag and for helping shift the timing of your sleep-wake cycle. However, for general insomnia, the evidence is more mixed than most people realize. More importantly, many over-the-counter melatonin products contain doses far higher than what your body naturally produces, and long-term effects of high-dose supplementation are not well understood.

If you do use melatonin, less is more. Research suggests that 0.5–1 mg taken 1–2 hours before your desired bedtime is often more effective than the 5–10 mg doses commonly sold. And consider getting your melatonin from tart cherry juice instead – it's a gentler, food-based approach.



## When to See a Doctor

Natural remedies are appropriate for occasional sleeplessness, mild insomnia, and general sleep quality improvement. But certain situations warrant professional evaluation:

- You regularly snore loudly, gasp for air during sleep, or your partner observes pauses in your breathing (these may indicate sleep apnea, a serious condition)
- You've had persistent insomnia lasting more than four weeks despite good sleep hygiene
- You experience excessive daytime sleepiness that affects your safety (especially while driving)
- Your sleep problems began after starting a new medication
- You feel anxious or depressed most days, and poor sleep is part of a larger picture

These situations need more than chamomile tea. A sleep study, cognitive behavioral therapy for insomnia (CBT-I), or targeted medical treatment may be what's needed – and there's no shame in seeking that help.

## Rest Is Not a Luxury – It's Medicine

In a culture that glorifies busyness and wears exhaustion as a badge of honor, choosing rest is a countercultural act. But your body was designed to need it. Every system in your body – your immune system, your cardiovascular system, your brain, your hormones, your emotional resilience – depends on sleep to repair and restore itself.

The remedies in this article aren't magic. They're tools – practical, affordable, evidence-informed tools that work with your body's own design rather than against it. Start with the foundation of good sleep hygiene. Add magnesium. Brew a cup of chamomile or passionflower tea.

Put a few drops of lavender on your pillow. Give your nervous system permission to wind down.

And tonight, when you lay your head down, know that you've done something real and worthwhile for your health — not with a prescription, but with knowledge, intention, and the quiet power of a remedy that actually works.

### **Important Disclaimer:**

This article is for educational purposes only and is not a substitute for professional medical advice. If you are experiencing chronic insomnia or a sleep disorder, consult a qualified healthcare provider. If you are taking medications, talk to your doctor or pharmacist before adding any supplement, as interactions are possible.

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