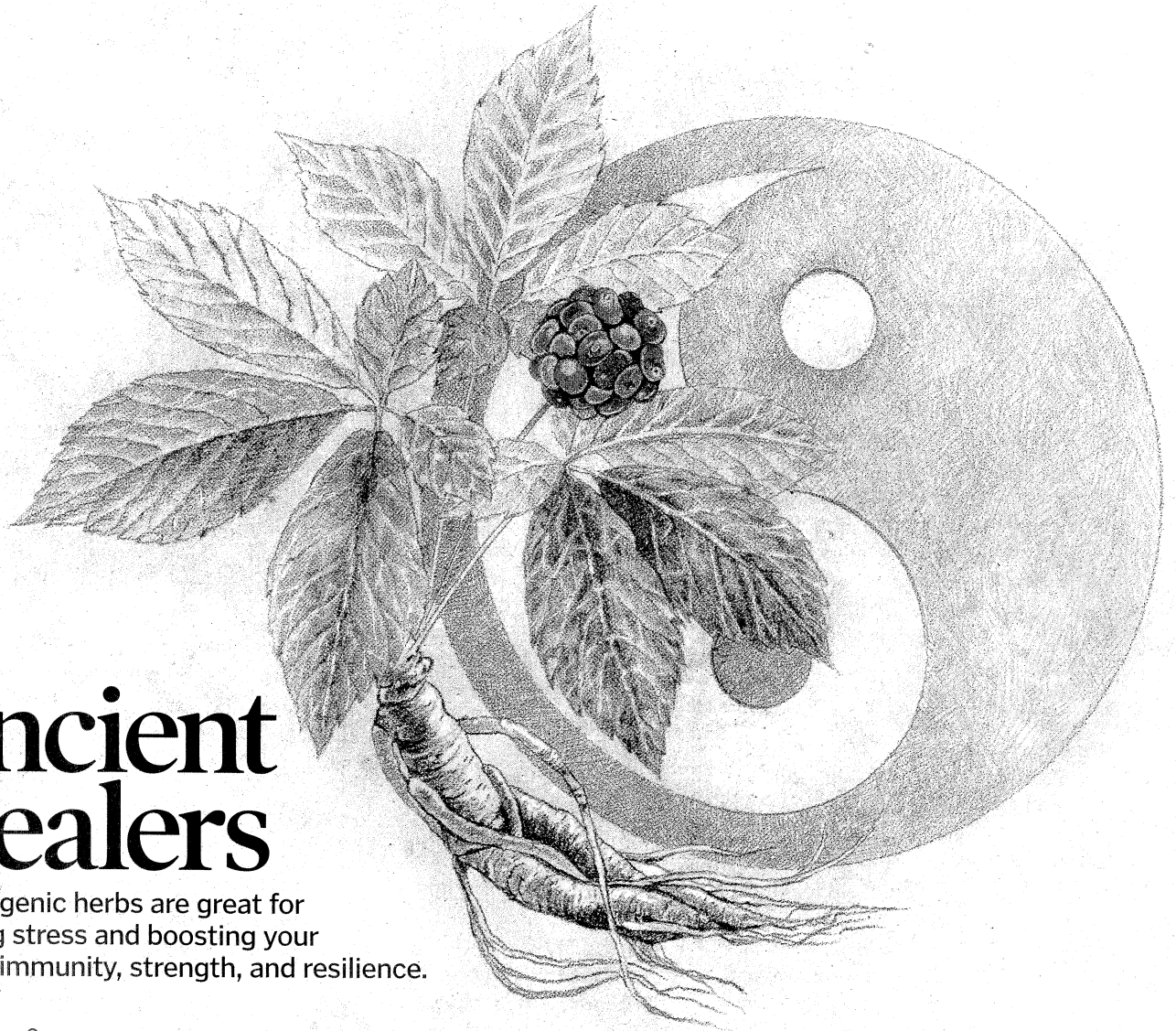


HEALTHY EATING

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Ancient Healers

Adaptogenic herbs are great for battling stress and boosting your overall immunity, strength, and resilience.

BY CATHERINE GUTHRIE

If ginseng were a Hollywood starlet, she'd be cast as a brainy, energetic woman, playing roles that shine with range and subtlety. And she'd share the screen with her equally radiant and talented herbal peers known as "adaptogens."

Ginseng and other adaptogenic herbs share rare and coveted traits — they mitigate the negative impact of stress by strengthening and stabilizing your body. "No category of herbs holds more potential for overworked, overstressed Americans than adaptogens," says David Winston, RH (AHG),

herbalist, ethnobotanist, and coauthor of *Adaptogens: Herbs for Strength, Stamina, and Stress Relief* (Healing Arts Press, 2007). "They are a bridge that can carry us over stressful situations with our health intact."

Sound like a newfangled health craze? Hardly.

Adaptogenic herbs — such as ginseng, rhodiola, ashwagandha, and eleuthero — have been used for thousands of years in ancient healing practices like Ayurveda and Traditional Chinese Medicine. Even so, many people have never heard of them.

"It's high time we started making the most of them in the West," says noted cancer researcher Bharat Aggarwal, PhD.

Stress and You

Imagine the body's interior as the shimmering surface of a calm lake. A small rock hits the water. The rock is an everyday irritant, like a traffic jam, that makes you late for the dentist. *Plink*. A few ripples appear in the water. No big deal.

Thirty minutes later, the dentist says you need a root canal. *Plunk*. A

bigger rock lands in your lake and the circle of ripples extends to the shoreline. Your heart beats faster and your mind spins.

Then your credit card is declined as you try to pay. *Splash!* The ripples of stress transform into waves.

Stress poisons every inch of the body. It cripples the immune system, upsets delicate hormones, and disrupts digestion, among other things. Most dangerous of all, it dials up inflammation. Stress lies at the root of every inflammatory disease, says Aggarwal, who is chief of the cytokine research section in the department of clinical immunology, bioimmunotherapy, and experimental therapeutics at the University of Texas MD Anderson Cancer Center in Houston.

“Controlled inflammation is useful, like using heat to cook,” he says, “but uncontrolled inflammation will burn your house down.” He counts off a few of the inflammatory diseases influenced, if not sparked, by stress: obesity, cancer, heart disease, arterial disease, depression, Alzheimer’s, arthritis — and the list goes on. “There are no two ways about it,” says Aggarwal. “Any kind of stress, be it physical, emotional, or psychological, will turn on inflammation in the body.”

That’s where adaptogens come into play. The body has a master switch that responds to things like stress, radiation, and tobacco smoke, says Aggarwal. That single switch controls more than 500 genes responsible for inflammation. Adaptogens ensure that the switch turns off and stays off. In doing so, they help snuff out inflammation.

“As far as something with concrete evidence of promoting health across the board,” says Donald Yance, MH, CN, SFO, master herbalist and author of *Adaptogens in Medical Herbalism* (Healing Arts Press, 2013), “there is nothing even in the same ballpark as adaptogens.”

Body Harmony

Scientists in the former USSR laid the groundwork for adaptogenic research, publishing more than 1,000 studies on

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Which Adaptogen Is Right for You?

“Adaptogens aren’t one-size-fits-all,” says David Winston, RH (AHG), herbalist, ethnobotanist, and coauthor of *Adaptogens: Herbs for Strength, Stamina, and Stress Relief*. Finding a good match between you and an adaptogenic herb is key.

Some herbs, like rhodiola, are quite stimulating and can worsen issues like insomnia and anxiety. Others, like holy basil, are especially helpful for regulating blood sugar, which makes them ideal for people with diabetes and metabolic syndrome. “It’s important to match the personality of the plant with the personality of the patient,” says Winston.

For expert guidance, consult a clinical herbalist. There is a searchable database of herbalists on the website of the American Herbalists Guild, the only national organization representing professionals in the field (www.americanherbalistsguild.com). If there is not an herbalist nearby, a naturopath, integrative physician, or functional-medicine practitioner may also be able to advise you instead.

In the meantime, here’s a rundown of the better-known adaptogens.



Common Name: American Ginseng

Botanical Name: *Panax quinquefolius*

Personality: American ginseng is Asian ginseng’s less-stimulating cousin. In Traditional Chinese Medicine, herbalists define medicine based on the concept of yin and yang, or ice and fire. Some consider American ginseng to have a yin, or cooling, effect on the body, but Winston considers it mildly warming, having a nourishing effect on the body without being overstimulating.

Like all adaptogens, American ginseng corrects imbalances in the endocrine system, including the adrenal glands. But it also has specialized properties that help improve pancreatic function. That detail makes American ginseng especially beneficial for people with metabolic syndrome and type 2 diabetes.

In general, American ginseng is ideal for people in their 40s and 50s who are still healthy but want a nourishing herb that will enhance strength and boost vitality without being overstimulating, says Winston. American ginseng is also good for allergic asthma and for inhibiting inflammation.

American and Asian ginseng costs from \$27 per root for farmed ginseng up to \$10,000 per root for wild. The expense makes it an easy target for less-than-scrupulous manufacturers, so always buy from a company you trust.

Dosage: Tincture — 60 to 100 drops, up to three times a day. Capsules — two 500 mg capsules twice a day.



Common Name: Asian White Ginseng

Botanical Name: *Panax ginseng*

Chinese Name: Sheng shai shen

Personality: Asian ginseng is considered one of the most stimulating of adaptogens. With the ability to restore moisture to the body, Asian white ginseng is ideal for someone who has a lot of “dry” symptoms, such as dry mouth, dry cough, or dry asthma.

Generally, Asian white ginseng is best for people in their 50s and 60s who have a good level of energy and vitality, says Winston. It can also be used to relieve jet lag and enhance immune function.

Dosage: Tincture — 20 to 40 drops, up to three times a day. Capsules — two 400 to 500 mg capsules two to three times a day.



Common Name: Asian Red Ginseng

Botanical Name: *Panax ginseng*

Chinese Name: Ren shen

Personality: When Asian white ginseng is steamed, it turns red and becomes more stimulating. Red ginseng is best for people whose vitality is depleted. It balances the immune system, bolstering it when a person is fighting cancer and downshifting it when someone’s immune system is in overdrive, such as with autoimmune diseases and allergies. Red ginseng can, however, exacerbate anxiety and insomnia.

Dosage: Tincture — 20 to 40 drops, up to three times a day. Capsules — two 400 to 500 mg capsules two to three times a day.



Common Name: Rhodiola

Botanical Name: *Rhodiola rosea*

Personality: Rhodiola has broad-reaching effects including restoring immune function, balancing blood sugar, and enhancing fertility. It also boosts alertness, lessens fatigue, and combats depression. Winston recommends it to people who feel depleted and fatigued due to a stressful lifestyle or rigorous physical work. It can also be used to support people with cancer, fibromyalgia, chronic fatigue syndrome, type 2 diabetes, and heart issues.

Rhodiola is a stimulating adaptogen and can cause insomnia in sensitive people. It can be drying and, therefore, worsen dry mouth or constipation.

Dosage: Tincture — 40 to 60 drops, up to three times a day. Capsule formulations vary, so follow label directions.



Common Name: Eleuthero

Botanical Name: *Eleutherococcus senticosus*

Personality: In the same family as ginseng but a distant relative, eleuthero relaxes the arteries, strengthens the immune system, and increases endurance and stamina. This adaptogen is ideal for people in their teens, 20s, and early 30s.

Winston recommends eleuthero for stressed-out, type A personalities who work long hours and skimp on sleep. It can be used during a time of chronic stress, such as finals week or a big work project; it is extremely safe and rarely overstimulating.

Dosage: Tincture — 60 to 100 drops, up to four times a day.



Common Name: Holy Basil

Botanical Name: *Ocimum tenuiflorum*, *Ocimum sanctum*

Personality: Holy basil is one of the mildest adaptogens, in terms of stimulants, but it has a far reach. Studies show it enhances health due to its antioxidant and anti-inflammatory properties. Additionally, holy basil strengthens memory and concentration. One quality that sets it apart, says Winston, is its ability to improve digestion and eliminate gas and bloating. Holy basil also reinforces the body’s ability to control blood-sugar levels, making it an excellent choice for people with type 2 diabetes or prediabetes.

Dosage: Tincture — 40 to 60 drops, up to three times a day. Capsule formulations vary, so follow label directions.



Common Name: Ashwagandha

Botanical Name: *Withania somnifera*

Personality: Ashwagandha is a calming adaptogen, making it ideal for people with anxiety, insomnia, or nervous tension. It can relieve muscle spasms and, therefore, is helpful in treating fibromyalgia. The herb also stimulates the thyroid, so it can be helpful for hypothyroidism.

Dosage: Tincture — 30 to 40 drops three times a day. Capsules — one 400 to 500 mg capsule twice a day.

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the herbs during the 1960s and '70s. Therefore, the original Soviet definition of an adaptogen is considered the gold standard.

An herb is adaptogenic if it meets three criteria: First, it's nontoxic, meaning it's safe for everyone. Second, its benefits are nonspecific, meaning it improves the entire body's resistance to stress, not just one particular system or organ. Third, it balances bodily functions, regardless of where the disruption may originate.

In other words, an adaptogen works like a tuning fork on your body: It helps bring your system back into harmony after a day of discord.

Roughly a dozen herbs are thought to be true adaptogens (see "Which Adaptogen Is Right for You?" on page 42). Another two dozen vie for placement on the list, meaning they show promise but scientists need more proof of their powers.

If you haven't heard the term before, it may be because Western medicine hasn't had a name for adaptogens other than the dubious-sounding word "tonic," says Mark Blumenthal, executive director of the American Botanical Council, a non-profit research and education organization providing information on botanicals. "The term 'adaptogen' is not recognized by modern medicine, which is more of a lament on conventional medicine than a reflection of the utility of the herbs."

"Adaptogen" refers to a plant's ability to adapt to its surroundings. Plants fight stressors in their environment by drawing on information coded in their DNA. For instance, plants know that shorter days mean less sun for photosynthesis, so they drop their leaves. Or, a sun-loving plant in shade will contort itself to reach for rays of light. This survival instinct is an adaptogenic response to stress.

The idea behind adaptogenic herbs is that a plant's DNA can do for people what it's done for plants for millions of years — make us more pliable, adaptable, and resilient. Each of these herbs has its own personality, thanks to different active ingredients. Some are more stimulating, while others

are more calming; some dial down a hyperactive immune system, and others increase immune response.

The star adaptogen, ginseng, has up to 38 active ingredients, called ginsenosides. Some improve digestion, some strengthen immunity, others boost sexual function. The potency of ginsenosides varies by ginseng species, the root's age, and how it was grown and harvested.

Herbalists like Winston believe the power of an adaptogen lies in the synergy of its active components. For that reason, the whole herb or a whole-herb extract is more powerful than a product that contains a single isolated ingredient, he says. In other words, you can't expect the same benefit from sucking on ginseng-laced candy as you would from taking a whole-herb tincture.



Many conventional drugs are anti-this and anti-that. In contrast, adaptogens enhance the body's overall ability to adapt in ways that maintain optimal functionality."

Enhancing Health

What sets adaptogens apart from other medicinal plants is their ability to nudge our bodies toward optimal health, or homeostasis.

The best way to appreciate this nuance is to compare adaptogens with pharmaceuticals. Drugs are typically designed to block or replace something. For instance, Celebrex lessens arthritis pain by inhibiting COX-2, an enzyme that causes inflammation. But COX-2 also shields the body from heart disease and stroke. Obstructing it brings on a two- to three-fold increase in heart attacks and strokes, according to a Food and Drug Administration alert. "Many conventional drugs are anti-this and

anti-that," explains Blumenthal. "In contrast, adaptogens enhance the body's overall ability to adapt in ways that maintain optimal functionality."

Aggarwal worries about the number of people using sophisticated drugs called TNF inhibitors, which turn off genes responsible for inflammation. The difference between using an adaptogen like ashwagandha to lower inflammation and a TNF inhibitor like Enbrel, which blocks the whole inflammatory process, is like adjusting the heat on your kitchen stove with a dial versus a fire extinguisher.

These modern drugs can turn off genes completely, he says, which can have serious consequences: The FDA requires the packages for TNF inhibitors to carry a warning that the drugs can increase a person's cancer risk.

As a cancer researcher, Aggarwal wonders whether his colleagues haven't made a mistake in ignoring ancient herbs like ginseng that have long safety profiles and thousands of years of data to draw upon. "Adaptogens allow us to safely dial a gene's expression up or down," he says. "That's huge."

Herbal Health Insurance

Like an award-winning actor, ginseng's brilliance lies in its quiet performance. But being understated doesn't always win the Oscar, even if it's deserved. Ultimately, what keeps adaptogens from raking in the awards is the fact that it's difficult to prove that something *prevents* disease, says Blumenthal. "How do you prove that you *didn't* get sick?"

Yet the 67-year-old Blumenthal believes he owes his own good health in part to the adaptogenic herbs he's been faithfully taking for nearly four decades.

"I get a case of the sniffles every three or four years, and that's it," he says. "Adaptogens are an insurance policy to make sure your body has the support it needs to reduce fatigue, lower odds of illness, and recover from stress. That's worth it to me." ❧

Catherine Guthrie is a Boston-based science writer and contributing editor to *Experience Life*.