

Herbal Actions Profile: Adaptogens

Adaptogens

The category of herbal adaptogens is likely the most popular and well known herbal actions in the modern alternative healthcare world these days. It's a relatively new definition for herbs, developed in 1964 by Russian scientists studying Eleuthero (*Eleutherococcus senticosus*) and noticing it's wide range of actions that were not easily defined by more traditional herbal actions. The classic definition of adaptogenic herbs is that they have a **non-specific action** that increases the bodies natural resistance to stressors. This could be external stressors from the environment, or internal stressors triggered by exercise, diet, lifestyle factors, and the stresses of modern life. They are also said to have a normalizing influence upon the physiology.

These are quite vague descriptions to say the least, and I believe it is critically important for us to rethink adaptogens, in the sense of what herbs actually qualify to be in this category, what they exactly are doing in the body, and how we are best to use them within a therapeutic context. This is very important because they are some of the most over-recommended herbs these days and can actually inflict harm upon the endocrine and nervous systems.

Because of their specificity for the stress response, many adaptogens are said to have an impact upon the hypothalamic-pituitary-adrenal axis (HPA). Thus they are often regarded as primary remedies for the treatment of the endocrine system. They do not block the stress response per se- which thankfully would be impossible- but rather they tend to bring balance to the sharp peaks and valleys in energy and mood from stress. In this way they are said to “smooth out the rough edges” in a sense.

These are the old textbook definition of adaptogens, developed by scientists (not herbalists) in the 1960's. The newer research on adaptogens refined by the scientists Panossian, Wikman, and Wagner, state that there are in fact only 3 plants (!!) that meet the classical definition of an adaptogen: Eleuthero (*Eleutherococcus senticosus*), Rhodiola (*Rhodiola rosea*), and Schizandra (*Schisandra chinensis*). This is interesting, as it seems that more and more herbs are constantly being regularly added to the “adaptogen” list.

These 3 scientists also question the statement that adaptogens are “normalizing” to the physiology of the body as well as to the relative safety of their use, which is generally thought of as being completely 100% safe for everyone to take. If we think of an herb like *Panax ginseng*, we see that **it is not normalizing!** It's a highly stimulating warming plant, very contraindicated for people with hot constitutions and a lot of energy. The new definition, much shorter and to the point, is that adaptogens are herbal preparations that can increase resistance to stress. Paul Bergner adds to that, in the short term.

What I think is critical here to look at, is that the way most people talk about and define the adaptogenic materia medica is from research done by scientists and not by clinicians! The entire scientific model is ultimately flawed because it is reductionistic in its approach, does not take into consideration the constitutional differences amongst people, and is really looking at the effects of standardized extracts, isolated constituents and their effects on a singular outcome within the physiology. **They aren't looking at how the whole plant affects the whole person, which is the root of a truly holistic practice of herbalism.**

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The mechanisms by which adaptogens operate are largely unknown, though theories range from modulating hormonal output and metabolism, adjusting blood glucose levels, liver metabolism, nervous and immune system activity, and altering cognitive function. This is an extremely diverse herbal action with a wide variety of plants that are all quite distinct from one another, with their own unique specific indications, energetics, and affinities. This is our closest western term for what in China are called “chi tonic herbs,” which are used to build up deficient constitutions that are weak, cold, tired, fatigued, and lethargic.

That being said, it is **extremely important** to understand that adaptogens are not “free energy.” If someone is severely and chronically fatigued, an adaptogen will usually not be curative and if not specifically indicated can actually do harm. When thinking of fatigue, there is a wide range of underlying factors that can contribute to it- from simply losing a few nights of good sleep, to severe diseases such as fibromyalgia, lupus, cancer, hypothyroidism, etc. These plants must always be given within a greater context of treatment including dietary and lifestyle adjustments, rest therapy, specific nutrients, and a recovery protocol. If we do not do this **adaptogens can in fact facilitate someones burnout.**

Most people have heard that adaptogens build your adrenals. But what the scientific research shows is that they don't, and actually some herbs make adrenal burnout worse! This is because they give you more energy by turning off the brake that your body usually presses that says “stop.” But with the adaptogens you think you have more energy than you actually do and keep going and pushing yourself- a process called overreaching. This was true of *Eleutherococcus*. One trial showed Rhodiola to be stabilizing to cortisol levels and Schizandra has been shown that short term cortisol effects are reduced, but the longer term response was increased. This is not supporting the adrenals, it is pushing them to work harder!

In both China and India, where the concept and therapeutic use of tonic herbs was developed and refined, we see that these herbs were used for very particular people, for very particular lengths of time (usually short term), and with specific cautions associated with their use. These cautions have all been neglected by most westerners who are familiar with the concept of adaptogens (which is really a scientific term) and not familiar with the appropriate use of tonic herbs from a holistic standpoint.

One of the problems that I've noticed many herbalists do is learn information about 1 plant called an adaptogen, and then automatically apply what they learned about that one plant and think all adaptogens do that! For some reason people start to lose sight of the differentials from herb to herb. Paul Bergner states it well: “ Each herb should be investigated for its own effects, side effects, contraindications, and mechanisms, and utilized for its uniqueness. *Ocimum*, *Chaga* mushroom, *Schizandra*, *Shatavari*, and *Cordyceps* have very little in common other than being traditionally-described as tonics.” What's important is that we choose an appropriate adaptogen that matches the underlying constitution and energetics of the person being worked with.

To quote Paul again, whose way of talking about this herbal action completely revolutionized the way I think about them: “The term adaptogen is not well defined by science outside of tonic effects, ignores the possible consequences of overstimulation, of masking effects,

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rebound effects after use or abuse, and promotes overgeneralization both in contemporary herbal literature and in scientific writings on the concept. The term adaptogen should be abandoned in favor of the categories of Tonic or Rasayana herbs in traditional systems.”

The reason he makes this statement is that inherent within the way in which adaptogens are taught makes them less applicable within a clinical context. “The now-discarded portions of the original definition give rise to elements of “magical thinking:” a plant will give energy or improve fatigue without any costs to the system or necessity to modify the lifestyle, it will increase performance without any clinical rebound effect, and will “normalize” the system without driving the balance in one direction or the other. These ideas readily lead to misuse of tonic herbs with consequences to the patients that may range from minor to grave.” (Paul Bergner)

I completely agree with Paul’s opinion that the term adaptogen should be abandoned in favor of more traditional terminology such as “chi tonic” (Chinese medicine) or rasayana (Ayurveda). I feel this way because the plants that are referred to as “adaptogens” are oftentimes misunderstood and misused, without any thought to their possible detrimental effects or contraindications. When we adopt the terms “chi tonic” or rasayana, we see that there is a specific context within which these types of plants are given, as well as specific types of people whom you *don’t* give these types of remedies.

One of the ways I like to think of these herbs is to use the analogy of the garden hose. The flow of water through the hose could be linked to someone’s overall state of vitality- how much juice is in their battery. If we aren’t getting any water coming out the end of the hose, this can be due to 3 primary causes: one is that there simply that the valve is opened up far enough or the well has run dry, the second is that there might be a kink in the hose preventing the water from making it to the end, or third there could be something in the hose blocking it. All three can result in a similar looking situation- lowered vitality and fatigue- but they will be treated *very* differently.

What is more common to see in our western culture is the second and third patterns, where someone has plenty of vital force entering the system, it is simply blocked in its flow due to some sort of constriction or tension in the system, or a blockage or stagnation. If you were to take an adaptogen in this kind of situation you will not get water to flow out of the hose. It doesn’t matter how much water is in the well or how open the valve is- you have to unkink the hose or remove the blockage!

This is what we could refer to as someone who is “hypertonic” or overly tonified (the kink), or someone who has damp accumulation or stagnation. They are too tight, constricted, tense- what we might think of as the wind/tension tissue state, or they have an excess accumulation of metabolic waste products and fluids, or the damp/stagnation tissue state. To get the energy moving (the water flowing) we need to relax the system with nervines and antispasmodics in order to unkink the hose, or to remove any stagnation in the system (typically with cleansing alteratives) that is blocking the flow of vitality.

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If you give adaptogens to people in these situations you can actually damage their system by bringing too much energy in. I like to think of it as forcing so much water through the hose that it bursts! Now the vital force (the water) is flowing all over the place, leaking out of the system, and ultimately isn't serving its purpose. Sure initially someone might feel more energy from them, but in the end it is not getting to the root cause of the problem.

The adaptogenic materia medica is best applied in the first situation- when someone is *truly* deficient in vital force from **long term** periods of stress, lack of sleep, suboptimal nutrition, and nervous system exhaustion. They can help to "refill the well" and open up the valve a little more so more vitality will begin to flow through the system. The hallmark indications in traditional systems of medicine are coldness, weakness, emaciation, deficiency, exhaustion, fatigue, lack of sleep, and reduced libido, among others. In Chinese Medicine, the chi tonic herbs usually were not given until someone was either middle ages or elderly, as their vital force is beginning to wane. In Ayurveda, the rasayanas typically were not administered unless specifically indicated, or post pancha karma, or detoxification therapies where the system has been cleansed of excesses of the doshas.

In short, this category of plants is *really* misunderstood, taken out of their traditional context usage, and used inappropriately in hopes of getting free energy, promoting longevity, and as a quick fix for fatigue without wanting to change the lifestyle factors that are causing the fatigue in the first place. I encourage you to study the adaptogenic materia medica from the perspectives of Chinese medicine, Ayurveda, and actual clinical practitioners, rather than getting stuck in the reductionistic information about them derived from scientific studies.

I also wanted to clarify here that I am in no way against these herbs or prejudiced! There are some truly wonderful and powerful remedies within this category that can really benefit the right people in profound ways. I am simply against misuse of herbs and taking them in an allopathic manner, which is what is going on today with the adaptogens. When they are indicated, I believe these plants should be taken with appropriate lifestyle changes to restore the system, such as getting adequate amounts of sleep (at least 8 hours a night), rest therapy (not sleeping but laying horizontal and resting), eating high quality nutrient rich foods, exercising more regularly, drinking appropriate amounts of water, and reducing caffeine, alcohol, and drug intake. These are the core things that will give us more energy. **We are not fatigued because of an adaptogen deficiency, but because of how we choose to live every day!**

Below are some useful ways of energetically dividing up the adaptogenic materia medica based on their temperature and moisture qualities, as well as their specific affinities for the blood and chi based on Chinese Medicine. I encourage you to study each of these remedies separately, and to **never** make assumptions about other plants based on what you learn about one plant simply because they are both adaptogenic herbs.

Warming Adaptogens (Yang Tonics)

Ashwaganda (*Withania somnifera*)

Asian Ginseng (*Panax ginseng*)- The red form is the hottest, the white form is less so.

Astragalus (*Astragalus membranaceus*)

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Cordyceps (*Cordyceps chinensis*)
Devil's Club (*Oplopanax horridum*)
Eleuthero (*Eleutherococcus senticosus*)
Schizandra (*Schizandra chinensis*)

Cooling Adaptogens

American Ginseng (*Panax quinquefolius*)
Goji (*Lycium chinensis*) - somewhat neutral, though anti-inflammatory and antioxidant...
Licorice (*Glycyrrhiza glabra*) - neutral to cool
Ophiopogon (*Mai Men Dong*)
Peony (*Paeonia lateriflora*)
Reishi (*Ganoderma lucidum*) - though it is slightly warming too...
Rhodiola (*Rhodiola rosea*) - slightly cooling though quite stimulating
Shatavari (*Asparagus racemosus*)

Moistening Adaptogens (Yin Tonics)

American Ginseng (*Panax quinquefolius*)
Astragalus (*Astragalus membranaceus*)
Asian Ginseng (*Panax ginseng*) *
Codonopsis (*Codonopsis tangshen*)
Devil's Club (*Oplopanax horridum*) *
Goji (*Lycium chinensis*)
He Shou Wu (*Polygonum multiflorum*)
Licorice (*Glycyrrhiza glabra*)
Ophiopogon (*Mai Men Dong*)
Shatavari (*Asparagus racemosus*)

*Although it is moistening it is not considered a yin tonic. For Oplopanax it depends on when it was harvested (spring or fall- autumn harvest is more moist)

Drying Adaptogens

Pretty much all of the warming adaptogens are also drying, but Schizandra (*Schizandra chinensis*) and Rhodiola (*Rhodiola rosea*) are extremely astringent and drying.

Blood Tonics*

Angelica/Dong Quai (*Angelica sinensis*)
Astragalus (*Astragalus membranaceus*)
He Shou Wu (*Polygonum multiflorum*)
Peony (*Paeonia lateriflora*)
Rehmannia (*Rehmannia glutinosa*)

*Blood deficiency in Chinese Medicine does not always equate to our western definition for anemia. Blood deficiency is usually associated with the following symptoms: emaciation, pale

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complexion, pale tongue, little to no coat on the tongue, weak thready pulse, dizziness on standing, spots before the eyes, heart palpitations, and insomnia.

Chi Tonics

American Ginseng (*Panax quinquefolius*)

Asian Ginseng (*Panax ginseng*)

Astragalus (*Astragalus membranaceus*)

Codonopsis (*Codonopsis pilosula*)

Eleuthero (*Eleutherococcus senticosus*)

Licorice (*Glycyrrhiza glabra*)

Reishi (*Ganoderma lucidum*)