Turmeric Alchemy™ and Cacao Alchemy™ Adaptogen Tonics

Adaptogens: What are they?

Adaptogens are a select group of herbs (and some mushrooms) that support the body's natural ability to deal with stress. This group of herbs has been highly revered all around the world due to their nonspecific ability to build vital energy, fortify the immune system, and for their overall effect on human homeostasis with regard to health and well-being.

Traditional Ayurveda has termed these plants as "Rasayanas" (restorative herbs) and include herbs such as ashwagandha root, amla berry, and shilajit. The traditional Chinese system of medicine (TCM) has termed these plants as superior medicine and include herbs such as astragalus root, schisandra berry, and eleuthero root. In Western herbalism, these are termed as nourishing and rebuilding herbal tonics and include plants such as American ginseng and licorice.

Although the concept of adaptogens had been around for thousands of years, it was not until 1947 that a Russian scientist, Dr. Lazarev, introduced a word to define this specific group of herbs. He was on a search for substances that could help soldiers turn into super soldiers, meaning herbs that would support a soldier's ability to overcome fatigue, improve their performance on the battlefield, improve general resistance to toxins, as well as support their general adaptation process to various stressors. Initially looking to pharmaceutical type stimulant drugs to support soldiers, Dr. Lazarev shifted his focus as he became increasingly concerned with the side effects and began looking to the natural world for answers. He coined the word "adaptogen" and defined herbs that helped the body to counter adverse physical, chemical, or biological stressors by raising nonspecific resistance toward such stress, thus allowing the organism to "adapt" to the stressful circumstances.[1]

Just 20 years later, in 1968, Breckham and Dardymov refined the definition of adaptogen[2] to mean any medicinal plants that:

- are nontoxic substances in normal doses;
- are nonspecific in their mode of action thus producing a general increase in the resilience factor of an organism toward multiple stressors (physical, chemical, and biological), and stimuli (both internal and external); and
- have a normalizing and balancing effect on physiology, irrespective of the direction of the change from physiological norms caused by the stressor

How Do Adaptogenic Plants Work in the Body?

Adaptogens are stress response modifiers. Through multiple, nonspecific interactions and diverse mechanisms, adaptogens increase an organism's resilience to various stressors, thereby promoting adaption and survival.[3] How adaptogens work cannot be reduced to one specific mechanism of action or defined in a classical, reductionist pharmacological receptor/drug interaction model.[3] Adaptogens have several mechanisms of action (e.g., molecular targets, signaling pathways, and molecular and communication networks) that are associated with regulation of homeostasis.[3] Certain plant adaptogens (e.g., ginseng, ashwagandha) are thought to interact with the hypothalamic-pituitary-adrenal (HPA) axis while other adaptogenic plants (e.g., rhodiola, schisandra) are presumed to interact with elements of the sympatho-adrenal-system (SAS)[3] with resultant decreases or normalizing and regulation of key mediators of stress response such as molecular chaperones (e.g., heat shock protein 70 (HSP70)), nitric oxide, and cortisol which are increased during times of stress.[4]

While no systematic studies on the structure-function activities of purified adaptogens currently exist, adaptogens are considered relatively innocuous in normal doses and owe their biological activity mainly to two main chemical groups: (1) terpenoids (e.g., sitoindosides and withanolides (ashwagandha), astragalosides (astragalus), and ganoderic acids (red reishi)); and (2) aromatic compounds (eleutheroside E (eleuthero) and schizandrin B (schisandra)), phenylpropane derivatives (syringin (eleuthero), rosavin (rhodiola)), and phenylethane derivatives (salidroside (rhodiola)).[3,5]

It has been suggested that adaptogens are experienced by the body as mild stress mimickers and as eustress (i.e., "good stress")[6] which induce stress protective responses thereby creating increased stress resilience with clear intention to adapt and cope to situations of threatened homeostasis.[7] This is an important topic of interest as in conjunction with creating and living a healthy life adaptogens have been shown to enhance overall longevity.[8,9]

Adaptogens Have the Following Qualities:[10]

- Supporting
- Nourishing
- Enriching
- Increasing
- Moistening
- Boosting
- Strengthening
- Fortifying
- Building

Adaptogens Help the Body:

- Increase energy[4]
- Improve stamina[11]
- Increase immune response[12]
- Improve homeostasis[13]
- Improve mental performance[14]

Two Products featuring Adaptogenic Tonic Blend:

Turmeric Alchemy

Turmeric Alchemy fuses the ancient Ayurvedic tradition of golden milk with our favorite adaptogens, resulting in a unique and powerful superfood tonic. Turmeric root, known throughout the world for its curcumin content and antioxidant properties,[66*] is synergistically enhanced with the warming herbal activators cardamom, cinnamon, ginger, and black pepper to help maximize the turmeric's bioavailability.

In Ayurvedic medicine, turmeric is known as warming and strengthening to the whole person.[67] For thousands of years, turmeric has been used to bolster the immune system and as a folk remedy for many common ailments.[68] Turmeric has a special place in Indian tradition where its many uses range from Indian cuisine where it is used as a spice in curry and other dishes, as a coloring agent for fabric, and as a therapeutic agent in their traditional medicinal system. The Hindu religion sees turmeric as auspicious and sacred.[69]

Cacao Alchemy

Cacao Alchemy combines organic Ecuadorian Arriba Criollo heirloom cacao powder (chocolate in its purest form) with warming cinnamon and a hint of spice from chili pepper. The addition of nutrient-dense superfoods carob, lucuma, and mesquite pod acts as natural whole-food, low-glycemic sweeteners to help balance out the beneficial bitter element of the antioxidant-rich cacao. Known as the "food of the gods" by the ancient Mayan culture, cacao was thought to be a sacred and medicinal food.

While chocolate has been consumed and revered and desired for over 3,000 years, no one knows for sure where Theobroma cacao, the tree where chocolate comes from, specifically originated. Evidence suggests that the Amazon River Basin or Venezuela might be where the Olmecs or perhaps the Maya came across it and took it north.[71] Depending on which Mesoamerican historical linguistics' Nahuatl etymology dictionary is used, the word chocolate comes from the Nahuatl word /chikolatl/ which meant "chocolate beverage."[72] Cacao was seen as a sacred plant elder by nature-based cultures is Mesoamerica.

Considered a medicine, cacao was treated with respect and used in ceremonies and rituals. The ancient mythology of cacao tells the story of its ability to aid humans in reconnecting to the natural world: "*When mankind gets out of harmony with the natural world, chocolate comes from the rainforest to open people's hearts and reestablish the balance.*"[74] Medicinally, it was commonly used for seizures, fevers, dysentery, digestive problems, and skin problems.[71] During wedding ceremonies, cacao beans were often exchanged between the bride and groom as cacao was such an important part of their lives, believed to be a plant of the gods.[73]

Cacao naturally contains theobromine and a small amount of caffeine. It can be stimulating to the central nervous system.[75] We invite you to consume cacao responsibly and with intent.

Adaptogenic Tonic Blend:

Our adaptogenic tonic blend (featured in both Turmeric Alchemy and Cacao Alchemy products) contains both whole roots (ashwagandha and astragalus) and pure extracts (schisandra, reishi, cordyceps, and chaga). Each adaptogen, in its own unique way, helps bring strength to the body's own innate ability to cope with stress and fatigue, thus promoting general vitality and well-being.* Adaptogens are extremely beneficial allies that support the individual in maintaining a healthy body and mind in today's modern world.*

Ashwagandha Root *(Withania somnifera)*

Ashwagandha (Indian Winter Cherry) is a plant in the Solanaceae family, more commonly known as the nightshade family. One of Earth's most utilized and important plant families, the nightshade family gives us a prime, ancient Ayurvedic herb, ashwagandha root, used in indigenous medicine for over 3,000 years.[15] Although not a true member of the ginseng family, ashwagandha is sometimes referred to as "Indian Ginseng" due to its ginseng-esque rejuvenating and tonic adaptogenic effects on the nervous system.[16] The word ashwagandha is a Sanskrit word that translates to "horse smell" (ashva means horse and gandha means smell).[17] Fresh ashwagandha root is said to have an aroma reminiscent to that of the sweat of a horse. Ashwagandha root, being associated with the horse archetype, gives us a clue as to what the properties of the root may be, namely, strength, balance, and vitality. Ashwagandha as an herbal ally has been resonating for so many people due to its stress adaptation and stress resilience properties.[18]

When we look at the species name for ashwagandha, somnifera, we can see that it relates to the masculine Latin noun somnus which translates to sleep, a periodic state of physiologic rest. This is owed to ashwagandha's effect on the sleep-wake cycle[19] and its reported mild to moderate hypnotic action and GABA mimetic activity.[20] Ashwagandha, with its many bioactive compounds (e.g., steroidal lactones (withanolides, withaferins), alkaloids (isopelletierine, anaferine), saponins),[21] is a multipurpose herb that acts on various systems of the human body: the neurological system,[22] the immune system,[23, 24] the energy-production system,[16] the endocrine system,[17] and the reproductive system.[25]

Astragalus Root *(Astragalus membranaceus)*

Astragalus is one of the most fundamental herbs used in TCM. Considered an adaptogenic tonic herb, astragalus is native to China, Mongolia, and Korea and has many folk uses. There are over two thousand species of Astragalus, this genus being the largest in the Fabaceae family (peas, carob, chickpeas, clover, alfalfa), and of these thousands of species only Astragalus membranaceus and Astragalus mongholicus are primarily used for medicinal purposes. The Chinese name for Astragalus is Huangqi (or Huan qi) which roughly translates to yellow leader/chief.[26] This is due to the root's interior yellow color and to it holding space as a leader amongst all other herbs.[27] Astragalus is listed in the Chinese Pharmacopeia for "qi (vital energy) deficiency."[28] Astragalus root was traditionally given to those with poor physical condition, deficiency, and exhibiting a low, faint voice.26 Traditionally, astragalus is made into a decoction in which pieces of root were boiled into soups and then removed prior to consumption.

Astragalus is biologically active and more than 100 compounds, including astragalosides, polysaccharides, flavonoids, saponins, polysaccharides, coumarins, and amino acids, have been identified so far.[29] These bioactive constituents have been studied for their influence on the heart,[30] brain,[31] lungs,[32] immune system,[27] kidneys,[33] liver,[34] intestine,[35] lymphatic system,36 and DNA37 as the active compounds exert an antioxidant effect on these organs and biological systems. Contemporary use of astragalus mainly focuses on its immunomodulating and antioxidant properties.

Schisandra Berry Extract *(Schisandra chinensis)*

Known as the five-taste fruit (wu wei zi) in TCM, schisandra was traditionally used to stabilize and hold in the primary energies of the body, strengthen the breath, and sharpen the mind. Schisandra was highly revered by Taoists who regarded it as the "quintessence of Chinese tonic herbs." Schisandra is considered both a yin and a yang tonic and due to its great Chinese reputation as a youth preserver, beauty aide, and powerful sexual tonic it was a highly fancied in ancient times by the Royal Court and the wealthy upper middle class, especially the women.[38]

This berry is one of the few herbs that includes the properties of all five tastes: bitter, spicy/pungent, salty, sour, and sweet, although its characteristic flavor is sour and salty.[38] Each flavor is considered to act on and nurture each of the five elements which relate to the body's corresponding organs: bitter»fire»heart, spicy/pungent»metal»lung, salty»water»kidney, sour»wood»liver, sweet»earth»spleen/pancreas. In TCM, schisandra is said to enter all twelve meridans[39] and was used to calm the heart (irritability) and quiet the spirit (dream-disturbed sleep).[38]

The local indigenous people of the Russian Far East region, the Nanai people, used schisandra berries as a folk tonic to improve their vision while night hunting as well as to ward off hunger, thirst, and exhaustion from all day hunts as well.[40] In more recent history, these properties were of considerable interest to Russian scientists during the Second World War as the berries held immense value as a competitive advantage for Russian soldiers. In already healthy subjects, schisandra has been shown to increase endurance and accuracy of movement, mental performance, and working capacity and generate alterations in the basal levels of nitric oxide and cortisol in blood and saliva with subsequent effects on the blood cells, vessels, and central nervous system (CNS).[40]

Schisandra contains many bioactive phytochemicals, including lignans, triterpenes, phenolic acids, flavonoids, essential oils, and polysaccharides. Schisandra's lignans (i.e., schizandrin and gamma-schizandrin) constitute the main secondary metabolites. The berries have been found to contain large quantities of organic acids (citric, malic, and tartaric) as well. These bioactive constituents have been studied for their pharmacological influence on the effects on the physical working capacity of the body,[41] mitigators of the stress response system,[42] liver detoxifying activity,[43,44] antioxidant activity,[45] CNS,[46] endocrine system,[47] immune system,[48] gastrointestinal system,[49] and cardiovascular system.[50] In the Russian Pharmacopeia, schisandra is classified as an adaptogenic herb. Phytotherapy is an official and

separate branch of medicine in Russia, thus, herbal medicinal preparations are considered official medicaments.[51]

Reishi Mushroom *(Ganoderma lingzhi)*

Reishi, the Japanese name for this auspicious, woody mushroom, has been used in traditional medicine for thousands of years for calming of the nerves and encouraging inner awareness. Reishi was a highly-prized folk tonic by Chinese royalty and Taoists alike as they knew that reishi's essence could nourish a person's spiritual radiance and heart, thus promoting health and longevity.[52] Lingzhi, the Chinese name for this mushroom, translates to herb of spiritual potency. Better known as the "Mushroom of Immortality," reishi has shown much promise as an overall health and immune system tonic.[53] In TCM, reishi, an adaptogen, is considered to be in the highest class of tonics, if not the highest tonic.

Wildcrafted Siberian Chaga Sclerotium Extract *(Inonotus obliquus)*

For centuries, chaga has been part of traditional folk medicine in countries such as China, Korea, Poland, Russia, and Scandinavian countries. It is primarily found growing on hardwood trees like the birch tree in the cold circumpolar forests of the Northern Hemisphere.

Chaga was highly prized and considered a mainstay for thousands of years by indigenous Siberian shamans who used it as a nutritive tonic, intuitively knowing that chaga's fungal spirit could nourish the energy that animates the body. As the folklore goes, Tsar Vladimir Monomakh used a preparation of chaga to address a lip issue during his reign of twelfth-century Russia.

The famed Russian author Aleksandr Solzhenitsyn wrote the novel The Cancer Ward in the late 1960s, depicting life in the Soviet Union during the 1950s. The novel painted the picture that a militarized police state is itself a type of cancer. It was Solzhenitsyn's intrigue of chaga that guided him to write about its magical, virtuous powers in his book which eventually went on to win a Nobel Prize and is how chaga became popular in the West.

Chaga is also known by names such as "King of Herbs" and "Diamond of the Forest." In addition to its immune-supporting* beta-glucans, chaga is a known source for many other bioactive constituents including betulin,[54] melanin,[55] triterpenes,[56] and antioxidants.[57] Chaga is considered an adaptogen as by definition an adaptogen helps to aid the body's innate resilience to stress thereby supporting overall human homeostasis.[4]

Cordyceps Mushroom Extract *(Cordyceps militaris)*

Considered both a yin and a yang tonic,[58,59] Cordyceps militaris is said to nourish jing (a person's essence) and tonify qi (vital energy). Cordyceps has also long been used as a kidney[60,61] and lung[61,62] tonic in TCM. Considered a suitable and praiseful alternative to wild cordyceps, science has shown that C. militaris is similar in nutrition and therapeutic efficacy.[63,64] Besides being known for its immune potentiating properties, cordyceps gained its popularity in the sports nutrition world for its ability to support energy levels.[64,65] In China, cordyceps, due to its adaptogenic properties, is given to support recovery after a health challenge.[65]

Precautions

Taking adaptogens are generally considered safe. However, you should discuss with your health care provider before adding them to your health regimen as several of them interact with prescription medications and are not recommended for people with certain conditions.

* These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

"Mother Nature has put miraculous healing plants on this Earth for us to benefit from. I am honored and deeply driven to uncover the greatest potential benefits from these elements, and to assemble these gifts from nature into products that help people to heal and to realize their full potential."

Dr. Jameth Sheridan – Naturopath and Hard-Core Herbal Medicine Researcher

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Additional Resources

The Amazing Adaptogens & Tonic Herbs
https://www.thesacredscience.com/adaptogen-wisdom-from-rosemary-gladstar

Herbs from India's Tribal Pouch: Ashwagandha
https://www.greenmedinfo.health/blog/herbs-indias-tribal-pouch-ashwagandha

Ashwagandha: Stress, Strength, Smarts and Sex
https://www.greenmedinfo.health/blog/ashwagandha-stress-strength-smarts-and-sex

Astragalus (*Astragalus membranaceus*) Monograph
https://www.herbrally.com/monographs/astragalus

Schisandra Monograph
https://www.herbrally.com/monographs/schisandra

How WHOLE Turmeric Heals the Damaged Brain
https://www.greenmedinfo.health/blog/how-whole-turmeric-heals-damaged-brain-1

The Spice That Prevents Fluoride From Destroying Your Brain
https://www.greenmedinfo.health/blog/spice-prevents-fluoride-destroying-your-brain

Ceremonial Grade Cacao - Experiencing Chocolate as the Magical Partner It Is
https://ceremonialcacao.blogspot.com/