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**FILE: ▪Adaptogens
▪Vitality**

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RE: Adaptogenic Herbs in Clinical Practices

Abascal K, Yarnell E. Increasing vitality with adaptogens. *Alternative & Complementary Therapies* 2003 April:54-60.

In this article, the authors discuss adaptogens, herbs which are not generally used for specific ailments, but as tonics may help patients achieve better health. A sidebar in the article summarizes uses and doses of the herbs included. Adaptogenic herbs have been found to benefit both those who have a stream of minor ailments and those with chronic diseases. They alleviate both physical and mental stress and may stimulate a non-specific stress response via the hypothalamic-pituitary-adrenal systems.

American ginseng (*Panax quinquefolius*) was used as a tonic by Native American tribes. Overharvested in the wild, organic, woods-cultivated American ginseng products are now available. In the past, cultivation under other conditions may result in products with fungicide and other residues. American ginseng has shown hypoglycemic action in clinical studies of patients with type 2 diabetes and has had other beneficial effects on diabetic patients. With ginkgo (*Ginkgo biloba*), it has reduced hyperactivity in children with attention deficit hyperactivity disorder. In vitro and animal studies have found antioxidant and immunoenhancing effects. In animals, it has been shown to be neuroprotective and memory-enhancing. American ginseng has antineoplastic effects and has been found to enhance the effects of most breast cancer chemotherapy drugs in vitro. The authors use American ginseng in their clinical practice to help middle-aged men and women handle midlife stressors and for older patients suffering from the results of earlier poor lifestyle choices, women experiencing menopausal symptoms, and those with breast cancer. The authors state that the breadth of research on and uses of this herb partly explain why it is considered an adaptogen.

While Abascal and Yarnell say that there have not been very many studies that have tested the use of adaptogens as such, they cite fewer studies on Asian ginseng (*Panax ginseng*) than might be expected. Like other adaptogens, its efficacy for any particular condition has yet to be proven. However, Asian ginseng extracts reduced stomach, lung, and liver cancers in a case-controlled

study in Korea; in another study, combined with conventional treatment and other herbs, it improved survival in patients with small-cell lung cancer. Research into Asian ginseng's reputed ability to enhance physical endurance has produced mixed results. Some studies have found it superior to trazodone for erectile dysfunction. It has also been found to raise men's sperm counts. A long-term controlled study found that it benefited patients with human immunodeficiency virus. Animal and in vitro studies have found Asian ginseng and/or its components to be antineoplastic, antiulcerogenic, and radioprotective. The authors use Asian ginseng for patients weakened by age or serious disease, but also express concern about fungicide and pesticide residues in commercial supplies (organic Asian ginseng is virtually nonexistent).

Eleuthero (*Eleutherococcus senticosus*; formerly called Siberian or Russian ginseng), has been used to increase vital energy, improve sleep quality, improve appetite, treat back pain and rheumatoid arthritis, and may be the best-studied adaptogen. However, most of the existing research is in Russian. Studies of over 6,000 people tested eleuthero's ability to improve mental alertness, work output, and work quality in individuals with difficult working conditions or requirements with generally positive results. In one study of children with acute dysentery, those who received eleuthero and monomycin recovered more quickly than those receiving monomycin alone. Eleuthero is not traditionally used for acute conditions. Other studies have found that eleuthero may be useful in pneumonia, pyelonephritis, or cancer. The authors use eleuthero for younger patients suffering from stress or for athletes seeking alternatives to steroids.

Schisandra (*Schisandra chinensis*) berries are used traditionally for nervous conditions, coughs, liver ailments, and depleted fluids. It enhances immune responses, and reduces fatigue and sleeplessness. In vitro and in vivo studies have found schisandra and its constituents to be neuroprotective, hepatoprotective, cardioprotective, renal-protective, antineoplastic, antioxidant, and immune-enhancing. It has stimulated liver regeneration, produced strong antihepatitis-C activity, enhanced cognition and memory in animals, and improved endurance. A sweet schisandra glycerite is useful for children who need an adaptogen. The authors use it for patients with chronic liver or heart ailments and for menopausal women and others experiencing night sweats.

Ashwaganda (*Withania somnifera*) root is a traditional general tonic for energy and health and a component of Ayurvedic formulas for arthritis, rheumatism, and disease prevention in both elderly and pregnant individuals. A double-blind, placebo-controlled, crossover study of 42 patients with osteoarthritis found that ashwaganda, in conjunction with other herbs, reduced pain and disability significantly. Other studies found improved hemoglobin levels in healthy children and adult men. Ashwaganda has stimulated neurite growth in human brain cells. In animals and in vitro, it has stimulated thyroid function, increased endurance, and shown hepatoprotective, renal-protective, antineoplastic, cardioprotective, anti-inflammatory, antioxidant, and immunomodulating effects. The authors use ashwaganda for low libido in patients suffering from stress or anxiety, those with arthritis, and for elderly patients with dementia.

Rhodiola (a.k.a. golden root, Arctic root; *Rhodiola rosea*) is used in mainstream Russian medicine for fatigue, infection, and psychiatric and neurological conditions, and, in healthy individuals, to relieve fatigue and to improve concentration, memory, and productivity. (See HC 040233.241.) Traditional uses include enhancing fertility, speeding adaptation to high altitudes, and treating gastrointestinal ailments and infections. In open and double-blinded human studies, rhodiola reduced fatigue, insomnia, weakness and headache; improved quality and quantity of work; and improved general well-being. Animal and in vitro studies have found antioxidant, cardioprotective, anticarcinogenic, and strengthening effects. The authors use rhodiola for

individuals whose stress and fatigue stems from intellectual work, including students; for those who have trouble concentrating; and for insomnia.

Several *Aralia* species, closely related to the ginsengs, are found in the U.S. and Asia. Asian aralias have been found to induce phase II enzymes in vitro, to be antioxidant, to normalize kidney function in diabetic rats, and to be hypoglycemic. Not enough is known of American aralias' constituents to determine if these same results might be found with their use. Following Michael Moore, director of the Southwest School of Botanical Medicine (Bisbee, AZ), the authors use aralia for patients with chronic lung problems. Either roots or berries are used; the berry tincture has a more pleasant taste.

Devil's club (*Oplopanax horridum*) is a member of the Araliaceae family. Used by Native Americans for rheumatism; stomach and bowel cramps; coughs, colds, and various pulmonary disorders; and as a purgative, some tribes used it to promote weight gain and as a blood tonic while others used it for diabetes. There is little research on devil's club. It has been found to inhibit various bacterial, viral, and fungal species. Again following Moore, the authors use devil's club in type 2 diabetes and for young women with recurring yeast (*Candida albicans*) infections. Moore also recommends it as an expectorant and respiratory stimulant, and for people with rheumatoid arthritis and other autoimmune disorders.

In summary, the authors write that stress is the root of most modern ailments. Adaptogens – those discussed and others – may help patients overcome stress. While differing subtly, they are, "in many respects, interchangeable and a high quality but less specific...product will usually work better than a lower quality product that matches...a patient's condition more exactly."

¾ Mariann Garner-Wizard

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