

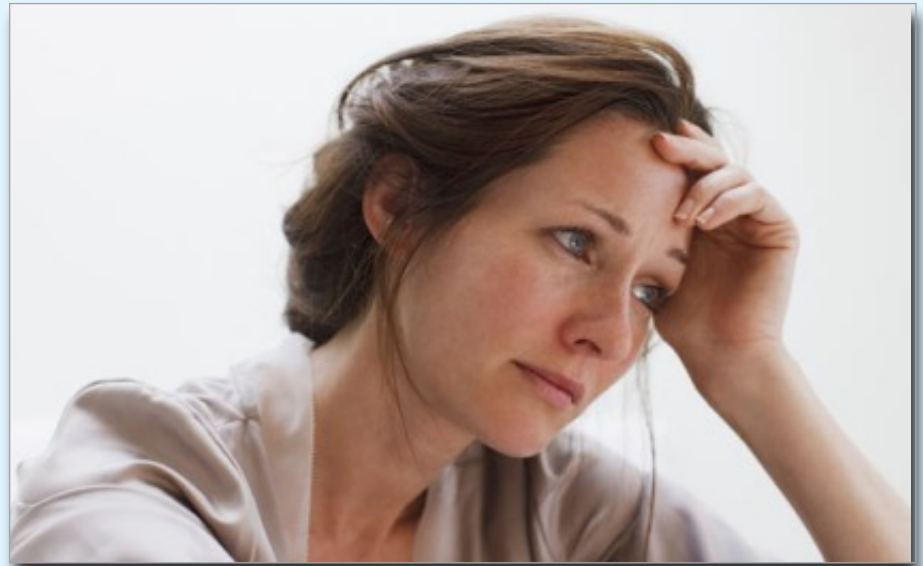
Ashwagandha Rejuvenative Effects

"Adaptogens have been used for centuries to help deal with stress whether it's physical, chemical, mental or emotional."

Do you have patients that are trapped in situations where they are just exhausted? It may be that they are stuck in a job or family situation that's sapping their strength. It could be a mom or dad who is caring for a dying parent or perhaps someone with an autistic child. These are people who could benefit from adaptogens. Adaptogens have been used for centuries to help deal with stress whether it's physical, chemical, mental or emotional.

Over centuries every culture has identified botanical agents that create or sustain increases in endurance, physical and mental performance. You can see a link to hear more about adaptogens and adaptogenic combinations particularly in terms of supporting healthy sexual function. But in terms of a single or isolated substance, Ashwagandha is one of the all-stars.

Ashwagandha or *withania somnifera* is referred to as a "royal herb" because of its multiple rejuvenative effects on the human body. It is nicknamed Indian ginseng or



winter cherry. It has been used for over 4,000 years. One researcher claimed it's the most commonly used and extensively studied adaptogen.

Many of us are familiar with Ashwagandha's ability to modulate cortisol but Ashwagandha affects multiple systems. Ashwagandha has been studied as adaptogenic, antioxidant, anticancer, antianxiety, antidepressant, cardio-protective, thyroid modulating, immune-modulating, antibacterial, antifungal, anti-inflammatory, neuroprotective, cognitive enhancing and as a hematopoietic agent.

In an article, "Ayurvedic medicinal plants for Alzheimer's disease: a review," authors believe Ashwagandha has some very interesting applications to cognitive problems including Alzheimer's. "Unlike other adaptogens, which tend to be stimulating, Ashwagandha has a calming effect and thus may be particularly indicated in people with Alzheimer's disease."

A recent double-blind, randomized, placebo-controlled study of the effects of Ashwagandha on stress found that it reduced symptoms of stress and inability to concentrate

and reversed forgetfulness in a dose-dependent manner, at 500 mg/day.

In animal models Ashwagandha extracts induced significant regeneration of both axons and dendrites and reversed amyloid peptide-induced memory deficiency in mice.

Another group reported that oral administration of a semi purified extract of the Ashwagandha root reversed behavioral deficits, plaque load, and accumulation of beta-amyloid peptides in mouse models of Alzheimer's disease.

Of course I am not suggesting we treat Alzheimer's patients with Ashwagandha; however, these studies show its versatility and healing abilities. But I like the idea of eating nutrients that reduce plaque and beta-amyloid peptides.

As I mentioned, because of the number of unique phytochemicals found in Ashwagandha and its long history of safety and rejuvenation effects, there are numerous articles on both animals and humans. One study with lab rats found that when given Ashwagandha, they actually were able to swim twice as long compared to the same type of rats that were not treated.

I found this study on resistance training interesting. 57 males aged 20-50 were divided into two randomized groups; 29 people in a treatment group who received 300 mg of Ashwagandha twice a day and 28 subjects who served as a control group and received a placebo. Following baseline measurements, both groups of subjects underwent resistance training for 8 weeks and measurements were repeated at the end of week 8.

Researchers were primarily interested in muscle strength but also evaluated muscle size, body composition, serum testosterone levels and muscle recovery. As you would expect with 8 weeks of resistance training, all the health indicators measured increased. However, the group taking the Ashwagandha

was found to be statistically significantly greater than the placebo in all areas. Muscle strength, muscle size and body fat percentage, testosterone, and muscle recovery were increased over the placebo group. There was also a 4.3 fold increase in testosterone.

When we think of substances that increase endurance, strength or physical and mental performance, we generally think of guarana, caffeine or what the Chinese may call a "yang effect." Ashwagandha however seems to work in the opposite direction.

An Indian study looked at anxiety with 64 participants in a 60-day clinical trial that compared 600 mg of Ashwagandha per day with placebo. Significant differences were found for all outcome measures, including scores on the Perceived Stress Scale ($p < 0.0001$), the General Health Questionnaire ($p < 0.0001$), and levels of cortisol in the bloodstream ($p = 0.0006$). Ashwagandha was well tolerated and reported no serious adverse events.

A new product by Biotics Research Corporation, Bio-Ashwagandha, contains 300 mg per capsule, in a 60 count bottle. Most of the studies use 250-300 mg twice a day, but note: animal studies safely use much higher doses.

Many of the sources of Ashwagandha come from third world countries and sometimes growing and processing conditions can be questionable. The beauty of using botanicals from Biotics is that you can be assured that it is free of heavy metals and solvents.

We've talked about testing elderly patients using a modified form of the Romberg test to see if we could increase neurological function specifically balance in the past. You can see a link to the right. Based on its adaptogenic qualities consider Bio-Ashwagandha as one of your first choices.

Thanks for reading this week's Tuesday Minute edition. I'll see you next Tuesday.