



ELITE
Personal Training and Fitness Solutions

HEALTH TOPIC OF THE WEEK

8/21 - Address Your Stress

Introduction

Since the beginning of time there has been stress, and there always will be. We all have plenty of stress. Some scenarios are within our control, but life is incredibly difficult and complicated and many factors are beyond our control.



2022 survey found that 27% of Americans reported being so stressed most days that they couldn't function properly. That's tragic.

While we can't always reduce external stressors in life, we can minimize the harmful effects of stress on our bodies! Our EPT clients know that regular exercise helps tremendously. This article offers an overview of the effects of stress (volumes could be written on this subject!) plus two other safe and natural ways to minimize its effects.

We can minimize the harmful effects of stress on our bodies!

Background

You've probably heard the phrase "fight-or-flight response". When danger is present, our bodies release stress hormones like cortisol so we can stay and fight or run away from the threat. This worked very well during caveman times. It can still help today - providing there is an actual threat.

Today, threats are often in our mind rather than the physical environment. It is natural to be concerned about health, finances, and relationships. However, excessive worry activates the fight or flight stress response. We pay a steep price. Stress affects every single system of the body! This includes the musculoskeletal, respiratory, cardiovascular, endocrine, gastrointestinal, nervous, and reproductive systems.



Elite Personal Training and Fitness Solutions does not provide medical treatment or intervention. We acknowledge scientific evidence that appropriately intensive exercise and sustainable nutritional intervention can have significant impact on chronic health disorders and obesity, dramatically improving symptoms when recommendations are followed. Please visit us at Eliteptf.com for more information and to schedule your evaluation.

Effects of Stress

Stress can leave us mentally lethargic and foggy. When stress becomes chronic, it can cause serious long-term damage and increase the risk for heart disease, diabetes, gastrointestinal disorders, obesity, sexual dysfunction, depression, anxiety, sleep disorders and a host of other problems.



Some Good News

Don't suffer unnecessarily. In addition to regular exercise, here are two great ways to minimize the harmful effects of stress.

Ashwagandha Lowers Cortisol

- Cortisol is a hormone that keeps the stress response activated. Excessive cortisol levels exacerbate the effects of stress.
- Ashwagandha is a plant that has been used in traditional Indian medicine for over 3000 years. It acts as an adaptogen, a substance that helps restore homeostasis and combat physical manifestations of stress.
- Research shows that the extract of the ashwagandha plant combats the negative effects of chronic stress by inhibiting cortisol release.



Impressive Clinical Results for Ashwagandha

- A randomized, placebo-controlled clinical trial divided chronically stressed individuals into four groups. One group took a placebo while the other three took ashwagandha in one of three dosages:
 - 125 mg once daily
 - 125 mg twice daily
 - 250 mg twice daily
- A commonly used anxiety scale as well as serum cortisol, serum C- reactive protein [marker for inflammation], pulse rate and heart rate were measured.
- All participants taking ashwagandha, compared to a placebo, reported reduced feelings of stress and anxiety with statistically and clinically significant improvement in fatigue, appetite loss, feelings of "impending doom", inability to concentrate, irritability, forgetfulness and sleeplessness.
- In the 125 mg twice daily group, serum cortisol levels were decreased by 24.2% and subjective stress levels were reduced by 71%.



Tip of the week (8/21), page 2

Boosting Mental Alertness – Spearmint to the Rescue

- Most of us have experienced “brain fog” due to stress. This generic term describes feeling mentally muddled, fuzzy, or confused.
- Spearmint has been used successfully to improve alertness and memory. Previous human research studies have found that polyphenol-rich spearmint extract increases alertness, vigor and short-term memory.
- Two recent randomized, placebo-controlled trials have added to the evidence that spearmint boosts mental alertness. Comparisons of individuals taking 900 mg of spearmint extract or placebo showed the spearmint extract group had significant improvements in mental agility and computerized cognitive tests without any impairment of sleep or mood.



Summary

Stress reduces quality of life and increases risk of chronic disease. Stress that runs rampant in the body contributes to physical, psychological, and emotional problems. In clinical trials, ashwagandha lowered feelings of stress by reducing cortisol levels. Mental fogginess, which is often stress-related, affects cognition. Spearmint extract studies showed improved reaction time, mental alertness and sustained attention in clinical studies.

Next Step

Interested in the fascinating area of adaptogens like ashwagandha? Want to learn more about other supplements that can help with stress? Besides exercise, there are safe and highly effective supplements that can help. Reach out to EPT so we can make the appropriate recommendations.



Tip of the week (8/21), page 3

References

- Auddy B, Hazra J, Mitra A, et al. A Standardized Withania Somnifera Extract Significantly Reduces Stress-Related Parameters in Chronically Stressed Humans: A Double-Blind, Randomized, Placebo-Controlled Study. 2008.
- Bhattacharya SK, Muruganandam AV. Adaptogenic activity of Withania somnifera: an experimental study using a rat model of chronic stress. *Pharmacol Biochem Behav.* 2003Jun;75(3):547-55.
- Falcone PH, Nieman KM, Tribby AC, et al. The attention-enhancing effects of spearmint extract supplementation in healthy men and women: a randomized, double-blind, placebo-controlled, parallel trial. *Nutr Res.* 2019. Apr; 64:24-38.
- Falcone PH, Tribby AC, Vogel RM, et al. Efficacy of a nootropic spearmint extract on reactive agility: a randomized, double-blind, placebo-controlled, parallel trial. *J Int Soc Sports Nutr.*2018. Dec 12;15(1):58.
- Gavelin HM, Neely AS, Dunas T, et al. Mental fatigue in stress-related exhaustion disorder: Structural brain correlates, clinical characteristics and relations with cognitive functioning. *Neuroimage Clin.* 2020;27:102337.
- Herrlinger KA, Nieman KM, Sanoshy KD, et al. Spearmint Extract Improves Working Memory in Men and Women with Age-Associated Memory Impairment. *J Altern Complement Med.*2018Jan;24(1):37-47.
- Kalmbach DA, Anderson JR, Drake CL. The impact of stress on sleep: Pathogenic sleep reactivity as a vulnerability to insomnia and circadian disorders. *J Sleep Res.*2018Dec;27(6).
- Lopresti AL, Smith SJ, Malvi H, et al. An investigation into the stress-relieving and pharmacological actions of an ashwagandha (*Withania somnifera*) extract: A randomized, double-blind, placebo-controlled study. *Medicine (Baltimore).*2019Sep;98(37).
- Mikulska P, Malinowska M, Ignacyk M, et al. Ashwagandha (*Withania somnifera*)-Current Research on the Health-Promoting Activities: A Narrative Review. *Pharmaceutics.*2023Mar 24;15(4).
- Mandlik Ingawale DS, Namdeo AG. Pharmacological evaluation of Ashwagandha highlighting its healthcare claims, safety, and toxicity aspects. *J Diet Suppl.*2021;18(2):183-226.
- Nieman KM, Sanoshy KD, Bresciani L, et al. Tolerance, bioavailability, and potential cognitive health implications of a distinct aqueous spearmint extract. *Functional Foods in Health and Disease.*201505/30;5(5):165-87.
- Yaribeygi H, Panahi Y, Sahraei H, et al. The impact of stress on body function: A review. *EXCLI J.*2017;16:1057-72.
- <https://www.heart.org/en/healthy-living/healthy-lifestyle/stress-management/stress-and-heart-health>. Accessed June 5, 2023.
- <https://www.intelligentlabs.org/ashwagandha-king-of-adaptogens/>. Accessed June 5, 2023



Tip of the week (8/21), page 4