

Global Congress on Integrated Healthcare

A joint Conference in Collaboration with United Research Forum, UK and Mutah University, Jordan

Under The Patronage of his Excellency Dr Yousef Goussous

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Adaptogens

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Abstract

Stress is the major cause of a lot of medical disorders that could affect humans nowadays as hypertension, diabetes..... Stress may be physical, psychic or pathological one. Adaptogens were initially defined as substances that enhance the “state of nonspecific resistance” and as a pharmacotherapeutic group, Adaptogens could be defined as herbal constituents that could increase attention and endurance in fatigue, and reduce stress-induced impairments and disorders related to the neuroendocrine and immune systems.

Previous studies have documented that adaptogens could exhibit neuro-protective, anti-fatigue, anti-depressive, anxiolytic, neuro-tropic and CNS stimulating activity.

In addition, a number of experimental studies demonstrated that adaptogens could exert an anti-fatigue effect that increases mental work capacity against a background of stress and fatigue, particularly in tolerance to mental exhaustion and enhanced attention.

Furthermore, a lot of pharmacological studies related to a number of adaptogens have provided a rationale for these effects. It was discovered that the stress—protective activity of adaptogens was correlated with regulation of homeostasis by means of several mechanisms of action, which was linked with the hypothalamic-pituitary- adrenal axis and the regulation of key mediators of stress response, such as molecular chaperons, cortisol and nitric oxide.

Today, research into adaptogens includes the following four compartments: (a) phyto-chemistry: isolation and structure elucidation of active constituents of adaptogenic plants; (b) biochemistry and molecular biology: mechanisms of stress protective activity of adaptogens on the molecular and cellular levels; (c) experimental and clinical pharmacology: efficacy and safety of adaptogens in stress- related disorders on animals and humans; (d) pharmaceutical development of herbal products that have well established medicinal use in evidence based medicine.

Moreover, a lot of studies that clearly indicate that certain adaptogenic substances can activate the protective mechanisms of cells, which is correlated with an increase in survival rate. These studies have so far been directed at the regulation of molecular chaperons (Heat Shock Proteins) and other key stress mediators.

Adaptogens can combat fatigue, enhance mental performance, ease depression and anxiety.

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Adaptogens have the potential to help indirectly with other health issues, like pain, digestive concerns, insomnia, and more. "Stress sets off a cascade of physical responses that affect immune function, our hormones, our cognitive function system, and our internal biologic clock. If these stressors persist, this leads to chronic illness.

Keywords: Adaptogens, Stress, Herbs.

Biography

I have over 35 years' experience as a physiologist. I have 5 years' experience as a head of physiology dpt. Zagazig university, EGYPT, head of quality assurance office in collage of clinicalm pharmacy, King faisal university KSA (2007-2013). As an educator, I now teach my students the processes to follow to provide appropriate levels of care for patients.