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Energy Elevation of the Population as a Way to Reduce External Energy Consumption

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Abstract

Mankind consumes too much energy. All experts agree on this. A large part of this consumption is due to manipulation of the temperature in rooms and vehicles, usually through air conditioning systems. There is a way to reduce this, and it is through adaptogens. These are plant-based substances that can raise and normalize endogenous energy status. Several peoples know and have such agents. They are to be distinguished from stimulants such as caffeine, which unfortunately are in common use at present. In this way, the excessive consumption of external energy could be reduced, for the benefit of the planet.

Keywords: energy consumption, energy reduction, adaptogens, resilience, sustainability

Introduction

The energy consumption of mankind is too great. All experts agree on this. Among other things, this is due to ingrained behaviors that could be changed. For example, in the so-called 1st world, it is common practice to use air conditioning to raise room temperatures to 22 degrees centigrade in winter, whereas in summer temperatures are often lowered to 18 degrees centigrade; "cool is cool". However, humans can live with any temperature between 20 and 30 degrees centigrade without problems.

In cabs and public transport worldwide, it is common practice, especially in hot countries, to set the air-conditioning systems of motor vehicles to 18 degrees as well.

We see an important reason for this in the fact that the energy status of many people is not optimal. This concerns the biochemical energy of the ATP, the membrane potentials of the cells and mitochondria, as well as the psychic energy of the Chì/Prana.

However, means exist to treat, alter and normalize these human energy phenomena. These include, above all, the adaptogens. Adaptogens or adaptogenic substances (European Medicines Agency, 2008; Brekhman & Dardymov, 1969; Meerson, 1984; Panossian, Wikman, & Wagner, 1999) are used in herbal medicine for the claimed stabilization of physiological processes and promotion of homeostasis. The concept of adaptogens was originally created in 1947 to describe a substance that may increase resistance to stress.

Adaptogens

They can increase stress resistance to the following factors:

- adverse environmental factors (external) such as cold, heat, noise, pollutants (Brekhman & Dardymov, 1969);
- unfavorable psychological factors (internal) such as anxiety, depression, etc. (Hovhannisyan et al., 2015; Olsson, von Schéele, & Panossian, 2009);
- high physical stresses such as sports and training.

Adaptogens also exert a positive effect on stress-induced diseases (Panossian & Wikman, 2009). They can curb long-term damage from e.g. long-term stress and protect cellular structures (Brekhman & Dardymov, 1969). Moreover, they can improve attention span (Spasov et al., 2000) and mental performance, especially in the case of stress-related fatigue and exhaustion, as well as increase resilience.

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These stress-shielding effects of adaptogens lie in maintaining the balance of various mechanisms associated with the hypothalamic-pituitary-adrenocortical axis. These include the regulation of key mediators of the stress response, including stress-activated c-Jun N-terminal kinases (JNK), chaperones, nitric oxide, and cortisol (Panossian, Wikman, & Wagner, 1999; Levin, 2015).

Examples of plants and mushrooms said to have such effects include: Korean ginseng, Siberian ginseng, Morinda citrifolia, Noni, Shiitake, Reishi/Ling-zhi, Maitake, Almond mushroom, Schisandra, Rhodiola (Panossian et al., 2007), Ashwagandha, Eleutherococcus sent. (Wagner, Hikino, & Farnsworth, 1985), Tulsi, Czaga mushrooms, Taurine, Jiaogulan, Maca, Kalmegh, Astragalus mongol., Cordyceps, and Cannabis/CBD (Wagner, Hikino, & Farnsworth, 1985; Panossian et al., 2007).

The Difference from Stimulants

It is important to distinguish adaptogens from stimulants. The difference between adaptogens (such as Rhodiola rosea, Schisandra chinensis, Eleutherococcus senticosus, etc.) and stimulants (such as caffeine, nicotine, amphetamines, etc.) is (1) that they can attach to receptors (e.g., from Gaba = Gamma-amino-butter-acid) in the brain and manipulate the brain, (2) that they can lead to tolerance after prolonged use and have a high potential for dependence. Depending on the substance, overdoses of stimulants can cause physical side effects such as high blood pressure, rapid heartbeat and sweating, as well as psychological side effects such as aggressiveness, overestimation of one's own capabilities and insomnia.

Adaptogens, on the other hand, do not cause sleep problems (Hovhannisyan et al., 2015; Spasov et al., 2000; Shevtsov et al., 2003) or stimulant-like side effects, even with prolonged use, as they have only a stress-protective effect, i.e., they exclusively suppress the stress response (Hancke et al., 1996). Nevertheless, adaptogens exhibit a measurably powerful effect both with single doses and with prolonged use, as evidenced by increased mental and physical performance, especially in the face of fatigue and stress (Hancke et al., 1996; Fulder, 1980).

Brekhman and Dardymov (1969) established three criteria that clearly distinguish adaptogens from stimulants:

- An adaptogen is completely harmless to the body, even when taken long-term. It shows no adaptogenic effect in normal or minimally altered bodily functions; the adaptogenic effect only comes into play in the case of a corresponding challenge (e.g. stress situation).
- An adaptogen non-specifically increases resistance to a wide range of physical, chemical and biological influences.
- An adaptogen achieves a normalizing effect on metabolism, regardless of the direction of preceding pathological changes (Panossian & Wagner, 2005).

Conclusion

The use of adaptogens could be an important step with the goal of reducing the excessive use of air conditioning and other energy consuming temperature manipulations worldwide. Endogenous energy normalization—which means predominantly elevation—of the population is a way to reduce external energy consumption. This could also reduce the considerable use of addictive drugs.

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