

Guillermou

In these reviews the evidence supports the idea that acute and chronic stressors influence various aspects of mitochondrial biology and that chronic exposure to stress can lead to molecular and functional recalibrations between mitochondria. Limitations of current studies in animals and humans are discussed. The maladaptive mitochondrial changes that characterize this subcellular state of stress are called mitochondrial allostatic load. Findings resulting from psychosomatic medicine, psychoneuroimmunology, and psychoneuroendocrinology have demonstrated that psychosocial experiences and life exposures influence subcellular processes, including immune activation/suppression, oncogenic behavior, regulation of gene expression, telomere maintenance and epigenetic processes.

In addition to energy production, mitochondria perform multiple essential functions that influence gene expression within the cell nucleus and physiological regulation throughout the organism. In particular, mitochondria are the main producers of reactive oxygen species (ROS) within the cell, which perform signaling and other life-sustaining functions at low levels, but can cause oxidative stress when they overcome defense mechanisms.

antioxidants, play a key role in neurodegenerative processes and in the pathophysiology of stress. Stress and aging, namely cellular metabolic activity, DNA damage, telomere length, cellular senescence and inflammatory response patterns. Mitochondrial function and dynamics have been implicated in many different aspects of social behavior, as well as behavioral changes related to anxiety and stress. However, mitochondrial changes could be i) a primary driving force of variation in social behavior, or rather ii) a secondary effect of another underlying (neuro)biological difference,

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A decrease in systemic NAD+ levels is a crucial factor in the deterioration of the organism in aging and in conditions such as diabetes and obesity, non-alcoholic fatty liver disease, kidney injury, impaired renal muscle function and sarcopenia, glaucoma, ischemia injury -reperfusion, vascular dysfunction, cognitive impairment There is evidence to support that mitochondrial function/dysfunction mediates the relationship between prenatal and postnatal stress and neurodevelopmental outcomes in infants. There are links between preserved functioning of these neural systems under stress and neuroplasticity, immunoregulation, composition of the gut microbiome and the integrity of the intestinal barrier and the blood-brain barrier.

Chronic stress is recognized for its comprehensive impact on various aspects of physical and mental health, including cardiovascular well-being, immune system function, cognitive performance, sleep quality, and overall quality of life. Table A2 of the last link examines the relationship between chronic stress (CSI) and various occupations. Table 5 presents a comprehensive analysis of socioeconomic/behavioral and health-related variables in relation to CSI Indicator risk.

A key socioeconomic and behavioral observation is the notable disparity in CSI risk.

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(2024).-- www.mdpi.com/.../302 (2024).--

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juststeve

A great checklist of easy to choose and use. No need for Head Med's for Depression with Depression listed as a possible side effect. Uncomplicated measures available with something for everyone without membership fees, costly equipment's, and much easier to fit into complicated work or life schedules. Kudos for Doc and Staff for pathways for health for everyone from the young to the young at heart.

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Very true Just, Dr. Mercola has provided us with an effective rhombus against stress and depression. This study analyzed the association between vitamin D intake or status and mental health in children within a systematic review of the literature, including both intervention and observational studies. The included studies were conducted in groups of healthy people or in people with mental health problems, and evaluated the following problems: behavioral problems, violent behavior, anxiety, depressive symptoms/depression, aggressive disorder, psychotic features, bipolar disorder, obsessive disorder compulsive, suicidal incident, as well as general patterns, as follows: mental health, level of distress, quality of life, well-being, mood, sleep patterns.

The vast majority of studies evaluated supported the possible positive influence of vitamin D on children's mental health. Vitamin D has the potential to cross the blood-brain barrier, activate receptors in brain cells and exert its direct impact on the central nervous system. Additionally, there is some evidence for the link between vitamin D and vitamin D receptors (VDR) and the regulation of human behavior, which is strongly suggested by the presence of VDR in brain areas such as the cortex, cerebellum, and limbic system.

Furthermore, studies in animal models indicated potential anti-inflammatory effects of vitamin D administration in the hippocampus and hypothalamus and its modulatory effects on brain-derived neurotrophic factor (BDNF) [65], which may also play a role. At the same time, the role of vitamin D can be attributed to its neuroprotective role in the brain, which is reflected in the modulation of neurotrophic signaling and the regulation of inflammation by inhibiting proinflammatory cytokines. www.mdpi.com/.../htm (2021)

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dale95

In my experience, it is best to have some simple sugars, like orange juice, or grape juice when stressed. They lower cortisol and adrenaline, That is a good thing if you do not require explosive energy output like running or heavy lifting. Worried about getting fat? With chronic stress, your odds of getting fat are high no matter what you do because cortisol is always high.

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forbiddenhealing

I posted this essay for Good Friday. Stress is also a condition of the ego, spiritual confusion and death-consciousness. forbiddenhealing.substack.com/.../observations-of-a-truth-seeker

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blowe

Capt. Randal was an interesting read. Thanks for posting the link.

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Great article Randall. Religion emerged as an ancestral need, or at least that is what is believed, and has continued to this day without any indication that it will disappear. If we look at history, we will realize that religion - if we can speak of it in a unifying way - has experienced many variations. Thus, for example, we have witnessed the birth of monotheistic religions, in which a single God is worshiped. These gods have also changed over the centuries and have taken on different names and forms. There are gods of whom representations cannot be made, as well as others to whom fantastic forms are attributed, sometimes related to animals.

“Commit yourself to God with all your heart, for many times it tends to rain his mercies at the time when hopes are driest” -Miguel del Cervantes- Religion has also become institutionalized and social institutions have been created in its name with the purpose of providing or improving services, such as education and health. The negative part is that great wars have also taken place under his name and a large number of crimes and injustices have been committed based on opinions of faith, often misinterpreted.

There are many explanations that have been put forward to try to explain the birth and life of religion throughout the centuries. One of the most defended is the one we already explained at the beginning - religion fulfills the function of providing answers to those questions that we have not been able to answer in any other way - but this is not the only explanation that has been given to religion.

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One explanation considers that religion appears to explain phenomena for which a logical interpretation was lacking. Some phenomena, for which it was as easy for us to find a convincing explanation as rain or thunder, were interpretable from a logical rationale and the motivation to explain their cause led people to create gods. Thus, the gods were the ones who caused those phenomena for which there was no rational explanation. The emergence of religion also appears as a form of idolatry. Some people became idolized for their actions and words. This adoration led to religions being created around these figures. The last explanation collected here tells us that religion appears as a cognitive adaptation. Cognition refers to mental functions, processes and states, with a particular focus on processes such as understanding, inference, decision making, planning and learning. This perspective is one of the most accepted within biology and psychology.

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Swilliam

Thank you for the link. Happy Easter!

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versatile

There are two basic ways to "fight the effects of stress" 1. Reduce stress. 2. Improve healthiness and strength to be able to make use of stress more effectively. Stress is life.

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