Impact of Solar Activity on Human Health via Variations in the Schumann Resonances

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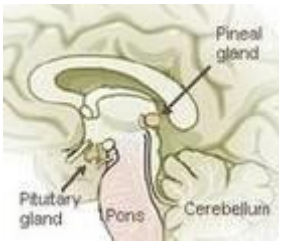
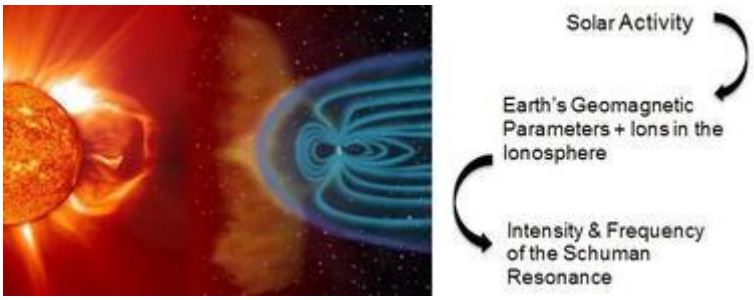
Ancient Civilizations had a wide knowledge of the solar system and the driving light force of our star - the Sun. Due to this fundamental understanding they established lifestyles set up around the Sun and the natural Solar Cycle that goes along with it. In recent decades, researchers have found significant evidence of correlations between a variety of human health conditions and Solar Activity. The pineal gland is a pine cone shaped gland of the endocrine system and when it is producing Melatonin, the pineal gland influences the human circadian (day, night) rhythm.

The Sun, and its luminosity, are not the only cause of human patterns. Scientists found out that when people are removed from outside stimuli, or more specificly are removed from the resonant frequency of the Earth, they lose their sense of time. These frequencies, the Schumann Resonances, were first documented as a global electromagnetic resonance by Nikola Tesla in 1899. They were examined for the first time in the 1960's by Winfried Schumann. In consequence of its low amplitude, the Schuman Resonance was often ignored as a factor. The Schuhmann Resonance is the principal background noise in the electromagnetic spectrum and has its fundamental peak at extremely low frequencies around 7.83 Hz and also peaks out at 14.3, 20.8, 27.3, 33.8 and 42.3 Hz, respectively. These low frequencies are able to be manipulated by stimuli such as changes in solar activity which influences the geomagnetic fields and earths ionosphere. (3)(4)

Melatonin is a hormone produced out of Serotonin and is released when the natural border, light, is missing. This change between light and dark is the first signal in part of the system that regulates our wake and sleep cycle, which leads to drowsiness and the lowering of body temperature (getting cold, tired before sleep). Naturally, the Melatonin level is high at night and reaches its peak production around 3:00 AM. An overproduction of Melatonin during winter is a given since there is little to no sunlight for a longer period of time, which leads to winter depression symptoms. (1)(2)



Variations in the Schumann Resonance correlate with human EEG rhythms and make any absorption of the Schuman Resonances signal into the brains a action that is detected by corresponding sensory organs. Studies have shown that solar or geomagnetic activity alters the human Melatonin level.



Dr. Neil Cherrys paper ‘Schumann Resonance and Sunspot Relations to Human Health Effects in Thailand’ from 2002 states the connection between the Schumann Resonance and Solar Activity:

“The solar activity modulates the earth’s geomagnetic parameters, the ions in the ionosphere and this modulates the intensity and frequency of the Schumann Resonance signal.” (5)

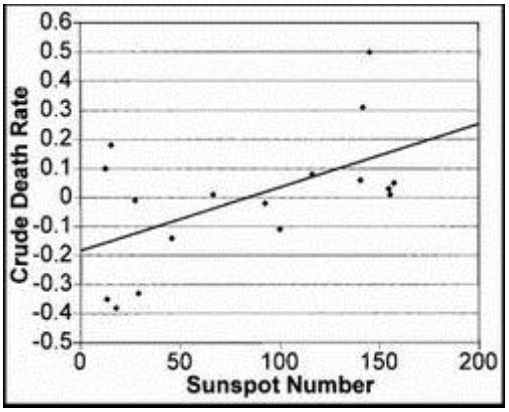
Studies conducted during the last decade show that there are significant correlations between reduced Melatonin Level and increased Geomagnetic Activity. In 1997 Burch proved that a significant dose-response reduction of Melatonin went along with an increase in the Geomagnetic Activity Index. The fact that the Schuman Resonances synchronizes extremely low frequency (ELF waves) and brain patterns in a homeostatic manner is also a contributor to the daily circadian rhythm synchronization. Then it’s possible that solar-geomagnetic induced changes in the Schuhmann Resonance signal intensity changes alter the Melatonin levels. These variations in Melatonin levels have many effects on the state of human health:

“Solar-Geomagnetic Activity induced changes in the Schumann Resonance signal intensity alters the Melatonin levels, Cherry (2002). Because of Melatonin’s vital role in the daily rhythm, all major organs have Melatonin receptors. Therefore a factor that alters human Melatonin secretion can influence almost every vital organ, especially the brain, heart, central nervous system and reproductive system. Melatonin is also the body’s most potent antioxidant. Hence reduced Melatonin leads to more oxidative free radical cellular damage, leading to cancer and premature aging through enhanced apoptosis (programmed cell death). In neurological activity, altered Melatonin is related to depression and suicide and increased circulatory stress leading to strokes (cerebrovascular mortality).”

This implies that the body both recovers and heals itself during sleeping. In this paper, Cherry is talking about the extremely close correlation between the Sunspot Number and the Schumann Resonance intensity. The correlations between Sunspot Numbers and Diseases, as well as mortality, start to make sense when an altered Schumann Resonance signal intensity is causing a reduction in Melatonin production which is leading to a significant increase a populations’ death rates during Geomagnetic Disturbances. Cherry's paper shows a correlations between Sunspot Numbers and diseases and mortality through investigation of the annual health, mortality rate data of Thailand.

A reduction in the release of Melatonin, triggered by alterations to the Schumann Resonance signal intensity is perpetually leading to a significant enhancement in the human populations’ death rate.

This graphic analysis demonstrates that the overall crude death rate is modulated by the Sunspot Cycle.



This supports, confirms the role of the Schumann Resonance signal in interacting with human brains through the reduction in Melatonin production, thereby enhancing the cell damage, increasing cancer risk, heart disease, neurological disease, and increasing the overall total death rate. This study confirms the relationship between Schumann Resonance Intensity, Sunspot Activity and human health. Solar and Geomagnetic Activity is a natural, fundamental factor for understanding human health. The Schumann Resonances interactions with human brains are capable of altering the Melatonin Homeostasis.(6)

REFERENCES: (1) http://www.sleepdex.org/melatonin.htm; Access: 6-10-2013

(2) http://biology.about.com/od/anatomy/p/pineal-gland.htm; Access: 6-10-2013

(3) The Electrical Nature of Storms', Donald R. MacGorman, W. D. Rus, 1998, S. 141; Access: 6-10-2013

(4) ‘Interaction between the Sun and human excitability’, Annette Deyhle, Ph.D.,GCI research team

https://docs.google.com/document/d/1XVAYMYMXH8_94t3o8k-TTFJan4UaEZYimNN514vbEck/edit; Access: 6-10-2013 (5) ‘Schumann Resonance and sunspot relations to human health effects in Thailand.’, Dr Neil Cherry Lincoln University Canterbury, New Zealand, 2002 (6) ‘Schumann Resonance and sunspot relations to human health effects in Thailand.’, Dr Neil Cherry Lincoln University Canterbury, New Zealand, 2002