

Allostatic Overload: What Everyone Should Know

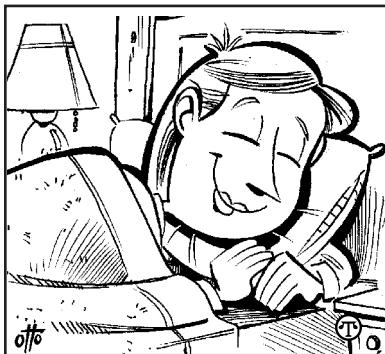
(NAPSA)—Significant advances in science are revealing that stress is actually a complex relationship of internal and external factors, and that some relatively simple lifestyle changes can contribute to a sense of well-being and improve health.

"A healthy lifestyle is the best way to reduce stress," according to Bruce McEwen, a member of the Board of Governors of the New York Academy of Sciences and the co-author of a new book, *The End of Stress As We Know It* (Dana Press).

The notion that stress is the result of external pressures is incomplete, says Dr. McEwen. Research now reveals how the body's defense mechanisms are involved in keeping stress at bay, and how the body's defense system breaks down from time to time.

When the body is working properly, people are able to adapt to the real or imagined threats that confront them in the course of everyday life in a process known as "allostasis." Allostasis is maintained by a complex network within the body—including hormones, the autonomic nervous system, substances in the brain, and chemicals in the immune system.

"When this network is working efficiently, its activity helps to mobilize energy reserves, promote efficient cardiovascular function, enhance memory of important events and improve the immune system's defense towards pathogens like viruses or bacteria," McEwen said. "Normally, the body is able to self-regulate the proper responses to external pressures, but occasionally it reaches a limit known as 'allostatic overload.'"



Research shows that managing stress is key to maintaining overall good health.

Many external pressures can contribute to this overload, such as conflicts at work or home, fears about war and terrorism, overworking, lack of sleep, economic difficulties, lack of exercise, excessive drinking and bad eating habits. Genetic risk factors, such as a predisposition for heart disease or diabetes, can also contribute to allostatic overload, Dr. McEwen adds.

If the imbalances in the body's regulatory network persist over long periods of time, the result can lead to illnesses such as hardening of the arteries, arthritis, diabetes, obesity, depression, and certain types of memory loss, the New York Academy of Sciences expert reported.

Changes in lifestyle may be the best remedy for allostatic overload. Maintaining social ties with friends and family is one factor. Restorative sleep and regular, moderate exercise are also important.

Founded in 1817, the New York Academy of Sciences is an independent, not-for-profit organization of over 22,000 members worldwide.