Stress response

Science, Biology



Stress response Stress is perceived as a regular response to events that are a threat to life or upsetting events. However, stress is not always bad since it helps in meeting targets because it forces one to work under pressure. Responses to various challenges are common to human beings. Structural and behavioural changes in the body are some of the responses brought by challenges that prompt humans to respond to it. However, there is a situation whereby responses to certain events are inadequate. In such situations, a defence mechanism known as stress response is initiated. Stress as it is widely known and is linked to negative effects (Pond 2004). According to Braun and Anderson (2007), communication between cells is a stress response. The authors explain that a disturbance of homeostasis by harmful forces lead to stress. Additionally, stressors cause stress and can be either endogenous or exogenous. Coping with stress depends on various factors. Some of the factors that can determine ways of perceiving or coping stress are health, age, genetic factors and social support. Homeostasis reliability is a stress response. However, destruction of body tissues can occur with time in case there is an excess in response to stress. Neuroendocrine response and hormones are initiated when there is an excess to stress response. Stressors activate different patterns of response which in turn initiate different neuroendocrine pathways and neural. Stress is common to the human body because of its capability and its adaption to experience stress. Stress is regarded as negative if it persists due to challenges met by humans. Psychological impacts of stress vary depending on stressors. Study of stressors common on children or teenagers such as abuse, violence, marital problems and other stressing events in the

family provide a clear view of psychological impacts of stressor. Child abuse is the most common problem in the society and has severe implications. For example, a child can view education negatively or perform poorly in school. Marital problems or divorce renders a child anti-social. The child remains depressed, anxious and less social than the peers. In adulthood stage, the child from divorced, or family with conflicts shows more stress and less friend support than a person from a family with no marital problems. Unrelieved stress causes depression, post traumatic stress disorders, panic attack conditions and drug or alcoholism addiction. Research shows that a child develops post traumatic stress disorder later in life when exposed to traumatic events such as wars (Schneiderman et al. 2004).

Furthermore, childhood exposure to unrelenting stressors leads to long-term neurobiological impacts. Mood disorders, structural change of central nervous system, hypo-immune dysfunction and early death are some of the consequences of chronic stressors. Stress also increases development of cardiovascular diseases because of irregular heartbeats and increase blood pressure stressed person. Cardiac output also increases; this led to the development of heart attack or stroke. Blood pressure and increase in cardiac output is not integrated with blood vessel because of irregular heartbeats (Hornstein and Schwerin 2012).

References

Braun, C, A & Anderson, C, M 2007, Pathophysiology: Functional Alterations in Human Health, Lippincott Williams & Wilkins, Philadelphia.

Hornstein, T, & Schwerin, J 2012, Biology of Women, Cengage Learning, New York.

Pond, W, G 2004, Encyclopedia of Animal Science (Print), CRC Press, New York.

Schneiderman, N, Ironson, G and Siegel, S, D 2005, 'Stress and Health: Psychological, Behavioral, and Biological Determinants', Annu Rev Clin Psychol, Vol. 1, pp 607–628.