Neurobehavioural science

Health & Medicine



Neurobehavioural Science: Article Review Article: UT Southwestern Medical Center. " Ghrelin likely involved in why we choose 'comfort foods' when stressed." ScienceDaily, 29 Jun. 2011. http://www.sciencedaily.com/relea ses/2011/06/110623130336. htm This article provides an overview of the study by UT Southwestern Medical Center in which the researchers tried to ascertain the link between hunger hormone ghlerin and increased intake of high calorie and high fat foods in times of stress. This article helps to explain the cause of increased eating and subsequent obesity in those subjected to psychosocial stress. The study was performed on animal models, mice and the results of the study extended to human beings. Ghrelin is a hormone that is released from the gastrointestinal tract and the hormone sends hunger signals to brain making the individual eat food. In the past, it has been shown that ghrelin levels elevate during chronic stress and elevation of the hormone levels lead to decreased anxiety and depression. In the mice models used in the study, it was found that raised ghrelin levels during stress led to increased body weight secondary to overeating. This clue helps in the prevention of obesity in those who are suffering from stress. The article elaborates as to how the study was conducted, how the mouse model was developed and also how they were subjected to stress. For the purpose of this investigation, a mouse model was developed for determination of hormones and also to ascertain the parts of brain that may be playing a role in the control of eating behaviors that are more complex, especially those secondary to stress, which lead to eating of comfort foods that are rich in high calories and high fats. The standard laboratory technique used to induce stress was exposing the mice to more dominant mice, i. e., bullying. The wild-type mice were subjected to bullying, i. e. stress gravitated towards https://assignbuster.com/neurobehavioural-science/

their pleasurable comfort food chamber, which they had been trained to do so. Those mice, who were genetically engineered not to produce ghrelin in response to stress, showed no preference towards the chamber. According to the chief investigator, Dr. Zigman, "Our findings show that ghrelin signaling is crucial to this particular behavior and that the increase in ghrelin which occurs as a result of chronic stress is probably behind these food-reward behaviors," This article is an interesting one because it provides information about interesting facts related to stress induced excessive eating and subsequent obesity. This study basically helps in explaining certain types of complex behaviors related to eating. Surge in the hunger hormone is one of the mechanisms by which people suffering from various types of psychosocial stress develop obesity. It provides hope for management of stress induced obesity. The article was presented in a lucid way which laymen can understand and assimilate. The language is clear and simple. Works Cited UT Southwestern Medical Center. " Ghrelin likely involved in why we choose 'comfort foods' when stressed." ScienceDaily, 29 Jun. 2011. http://www.sciencedaily.com/releases/2011/06/110623130336.htm