**Stress**

**What is stress?**

When a person encounters an event or a situation which has a physiological and phycological effect of their body they can be experiencing stress. They may feel they cannot cope and everything has become too much to deal with.

The event maybe traumatic such as bereavement or the situation maybe that they are in an exam, for e.g. a driving test. The situation or event which causes the stress is known as a stressor. Stressors can be both positive, known as eustress for example taking an exam or negative, for example, job loss. Eustress can help individuals to achieve, by motivating them.Yes, eustress is a positive thing.

What may stress one person may not affect another individual in the same way. Some people find driving stressful, whereas other people may find noise is their stressor.

When an individual is stressed the body reacts in response to the stressor, you may feel tired, experience headaches, insomnia,upset stomach, dry mouth, your heart will be pounding, and you may feel your body and mind is out of control. The reason an individual will be feeling all of the latter will be due to the body releasing hormones as a response to the stress. There are two types of stress responses, one type of stress is known as the fight-or flight response and was first described as this in the 1920s by an American physiologist Walter Cannon, he realized,“that a chain of rapidly occurring reactions inside the body helped to mobilize the body’s resources to deal with the threatening circumstances”. (Online- verywellmind) (updated June 11th, 2018). An occasion where the body of an animal or human goes into the fight or flight response could be a rabbit about to be attacked, the rabbit sees its predator. The fear (stressor) that triggers its body to react quickly and run from its predator causes the fight or flight response in its body and the rabbit will react quickly to get to safety. The rapid reaction can be useful; however the second type of stress when the body is experiencing stress on a long-term basis can be detrimental to health.

So, what happens in the fight and flight response and why is long term stress so bad for us?

Our bodies command centre, known as the hypothalamus in the brain, responds to a distress signal sent by the amygdala. The hypothalamus communicates to the body via the autonomic system (Online – Harvard health 05/07/2018).

The autonomic nervous system, which controls involuntary body functions e.g. breathing, consists of the sympathetic nervous system and the parasympathetic nervous system.

The fight or flight response–the rabbit sees its predator and is frightened, or a person is about to take an exam,it is the sympathetic nervous system that triggers the fight or flight response providing the body with a surge of energy to cope with the stressful occurrence.This is achieved by the hypothalamus activating the sympathetic nervous system via autonomic nerves to the adrenal glands. The adrenal glands respond by releasing adrenaline into the blood.

The effects of Adrenaline on the body–adrenaline enables the rabbit to have the best possibly chance to run to safety, by increasing its heart rate therefore increasing blood supply to the muscles, and to other organs. Oxygen levels to the brain are increased heightening the senses (hearing, smell, sight), adrenaline also causes the release of glucose from stores providing energy to all parts of the body, and thus the person in the exam will be feeling motivated and alert. Once adrenaline levels start decline the hypothalamus activates the HPA system:

Hypothalamic pituitary adrenal system. (HPA) This system regulates long term stress.-The stressor activates the Hypothalamic Pituitary Axis, this network consists of the hypothalamus, the pituitary gland and the adrenal glands. (Online - understanding the stress response- Harvard health 5/7/18) If the stressor continues to remain the hypothalamus releases corticotropic -releasing hormone which in turn causes the pituitary gland to release adrenocorticotropic hormone (ACTH). The adrenalsthen respond by releasing cortisol.

Cortisol- the stress hormone -Cortisol has numerous functions in the body including: glucose metabolism, blood pressure regulation, insulin release, immune function, and is involved with the inflammatory response. Although cortisol has positive effects when it’s initially released, prolonged and too higher quantities in the bloodstream due to constant chronic stress has a detrimental effect on the body. If the parasympathetic nervous system is not activated the body cannot return to its normal state and we experience chronic stress.Elevated levels of cortisol for prolonged periods of time in the body decreases immunity, increases fat deposition, inhibits thyroid hormone activation and promotes breakdown of muscle bone and connective tissue. (Online: Natural Health news July 2011). This is well explained. Please be aware of the effects of the flight or fight response on other systems i.e. the digestive and reproductive systems.

Life today is manic and many of us experience chronic stress which suggested by recent research, left unmanaged leads to illnesses such as heart disease, stomach ulcers, Diabetes, depression, muscular aches. (Online: AARP Bulletin Nov 2014). It is crucial we deal with our stress levels to prevent such illnesses. Healthy foods in our diet, plenty of sleep and exercise to maintain our bodies which are amazing machines will help maintain balance and lowerstress or at least manage it better. Ensuring our emotional well being is not neglected is crucial to sustaining a well- balanced body. If our minds and souls are looked after our physical state benefits. Taking time out to enjoy the things one likes doing, just stopping for a while and appreciating the beauty of life and the people around you. Positivity is a great force to combat stress, saying you can achieve and everything will work out ok if I look after myself and plan day to day what will help me to achieve any goals. Good. Strategies such as mindfulness and meditation are also invaluable in helping manage stress.

It is very easy to say what will help people combat stress, however some people do drink or smoke as an outlet and sometimes have to find out themselves that this only worsens their stress in the long term as eventually their bodies will tell them through illness.Good. These outlets may make someone feel better for a very short period of time but the negative effects are felt very quickly.

Over the years I have experienced stress as we all have, I find Mindfulness helps me, life in the 21st Century is fast, time goes by so quickly, I find the simple things make me so happy and calm me. Being in my garden, surrounded by beautiful trees and plants. Spending time with my family and friends is precious and my pets. Although when I do feel stressed I do turn to chocolate! but there are worse things!There certainly are!

Well done you have addressed all of the key elements of the requirements for this essay. You back up your findings with evidenced research and demonstrate that you understand how the effects of stress affect the body. I have made a comment on what happens to the digestive and reproductive systems in the fight or flight mode. It is important to know that reproductive health can also be affected by long term stress. Also, your reference list needs re-ordering, refer to the college handout to double check what is needed here.

Otherwise, very well done. Ruth Hodgkiss 18/07/2018

Well done a good essay with a clear and logical approach explaining the stress response in humans and rabbits! Please amend your referencing and then I can pass your good work. A Walker 19.7.18

**Thank you for amending, you don’t need to put webpage as we can see that it is.**

**A Walker Pass 14.2.19**

Referencesthis should be in alphabetical order

Webpage- verywellmind (updated June 11th, 2018).https://www.verywellmind.com/(accessed 7/7/2018)

Webpage – Harvard health -understanding the stress response, (05/07/2018).https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response.(accessedJuly 2018)

Webpage-: Natural Health 365 (2011-2018). https://www.naturalhealth365.com/cortisol-chronic-stress-2252.htm (accessed July 2018)

Webpage- AARP Bulletin (Nov 2014) http://www.aarp.org/health/healthy-living/info-2014/stress-and-disease.html (accessed July 2018)

ComptemporaryReflexologyCollege- the Hub-https://www.contemporaryreflexologycollege.com/component/users/ (accessed July 2018)

ComptemporaryReflexologyCollege- the Hub-https://www.contemporaryreflexologycollege.com/component/users/ (accessed July 2018)

Webpage- AARP Bulletin (Nov 2014) http://www.aarp.org/health/healthy-living/info-2014/stress-and-disease.html (accessed July 2018)

Webpage – Harvard health -understanding the stress response, (05/07/2018).https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response.(accessedJuly 2018)

Webpage-: Natural Health 365 (2011-2018). https://www.naturalhealth365.com/cortisol-chronic-stress-2252.htm (accessed July 2018)

Webpage- verywellmind (updated June 11th, 2018).https://www.verywellmind.com/(accessed 7/7/2018)