INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

e-ISSN : 2583-1062

Impact Factor : 5.725

www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

CHANGES IN DIETARY HABITS DUE TO STRESS

Farheen Shahid[1]

[1]University Institute Of Diet And Nutritional Sciences (Bdns), The University Of Lahore– Islamabad Campus, Japan Road, Sihala, Islamabad, Pakistan.

ABSTRACT

Stress has a significant role in both the first stages of addiction and its relapse, and it may also raise the risk of obesity and other metabolic illnesses. Uncontrollable stress alters eating habits and increases the salience and intake of foods that are very appealing; over time, this may affect allostatic load and result in neurobiological modifications that encourage behaviour that is more and more compulsive. Changes in the hypothalamus-pituitary-adrenal (HPA) axis, glucose metabolism, insulin sensitivity, and other hormones and neuropeptides associated with hunger may all play a role in this connection. Chronic stress may have an impact on the mesolimbic dopaminergic system and other brain areas associated with stress and motivation circuits on a neurocircuitry level. Together, these may synergistically increase food choice, desire for, and seeking after highly appetising meals, as well as physiological changes that support weight gain and body fat accumulation. Individual variations in stressor types and obesity susceptibility may further modify this process. When creating effective preventive and treatment plans for obesity and associated metabolic illnesses, it is crucial to comprehend the relationships and interconnections between stress, neurobiological adaptations, and obesity.

Keywords: Stress, Eating habits, metabolic illnesses, hypothalamus -pituitary-adernal (HPA)axis, insulin sensitivity, weight gain, obesity, physiological changes, allostatic load.

1. INTRODUCTION

Human eating habits are believed to be affected by stress. There are two ways in which stress seems to affect general dietary habits:

- Under eating
- Over eating

which the level of stress may affect. Stress has long been thought to play a significant role in the emergence of several eating disorders and addictive behaviours.Changes in eating patterns are frequently brought on by stress. Some people overeat or indulge in comfort foods as a way to reduce stress. Some people could become lethargic and eat less. Salty, fatty, and sweet food desires may all be affected by stress. Even during stressful times, it's crucial to try for a balanced diet and be aware of these changes.Certainly! Stress may have a big influence on a lot of different things in our lives, including how we eat. Many people discover that they change their eating habits in reaction to their emotional condition when under stress. These modifications can show up in a variety of ways, including an increase in the intake of comfort foods, irregular mealtimes, intensified appetites for particular food types, or even a lack of appetite. Knowing how stress impacts our eating patterns might enable us to make better decisions and maintain a healthier lifestyle.The feeling of stress has practically become a regular occurrence in the current world of hectic lives, constant connectedness, and ever-rising demands. The effects of stress on our general wellbeing grow more and more clear as we handle the complexity of our jobs, relationships, and personal goals. In the middle of these difficulties, it's intriguing to see how stress affects more than just mental and emotional states; it also has an impact on one of human beings' most basic activities: eating.Researchers, health experts, and people alike have been interested in the complex interaction between stress and eating habits. Stress, whether it is acute or chronic, causes a series of physiological reactions in the body, causing hormones, neurotransmitters, and our brain circuits to dance in a delicate way. Our food choices frequently reflect this complex choreography, changing our eating habits in a variety of ways.Some people's insatiable appetites are sparked by even the slightest hint of stress, driving them to seek out decadent comfort foods that offer momentary relief from the turmoil of their emotions. Sugary, fatty, or salty snacks become irresistible due to the fact that they provide a momentary haven from the day's heaviest responsibilities. On the opposite end of the range, stress can have a negative impact on appetite, reducing the desire to eat and sometimes resulting in missed meals or insufficient calorie intake. This variation in eating habits highlights the complex nature of our relationship with food under stress.Beyond the domain of the now, stress also affects the timing and composition of our meals. The normal rhythm of meals can be disrupted by erratic schedules created by stressful upheaval, which can result in erratic eating habits that test the body's internal clock. The gravitational pull towards quick, practical solutions grows stronger, possibly opening the door for dietary concessions. As stress pushes us towards easier but less nourishing alternatives, the elusive equilibrium that traditionally characterised our meals may break.The complex relationship between stress and our eating patterns also includes desires. According to research, certain dietary cravings for items high in sugar, salt, or fat might be triggered

by stress. These cravings are not arbitrary mental whims; they are frequently caused by neurobiological reactions that try to reduce stress by consuming foods that activate reward centres in the brain. This complex interaction illuminates the need to seek out "comfort foods" amid trying circumstances.Let's sum up by saying that the connection between stress and eating habits is a complex web made of threads from biology, psychology, and culture. Understanding how stress affects our eating habits enables us to make informed decisions that promote both physical and emotional well-being as we negotiate the complex terrain of our lives. We may develop a stronger sense of awareness and be better able to navigate the gastronomic landscape by recognising the influence that stress has on our nutritional habits.

2. APPETIDE LOSS IN STRESS

According to several studies, those who are under stress prefer to consume more snacks and meals rich in sugar and fat than those who are not worried. Obesity or being underweight may be influenced by stress-induced eating. Uncontrollable stress alters a person's eating habits. Stress might temporarily suppress your appetite. Depending on the kind of stress, numerous factors might affect appetite levels. While some people lose track of their hunger, others overeat as a result of stress. Stress has been demonstrated to enhance the desire for high-fat and high-sugar snacks, which may raise the risk of obesity.

ADDICTION IN STRESS:

Stress has a significant role in both the first stages of addiction and its relapse, and it may also raise the risk of obesity and other metabolic illnesses. Uncontrollable stress alters eating habits and increases the salience and intake of foods that are very delicious; over time, this may affect the allostatic load and result in neurobiological alterations that encourage compulsive behaviour. Changes in the hypothalamic-pituitary-adrenal (HPA) axis, glucose metabolism, insulin sensitivity, and other hormones and neuropeptides associated with hunger may all play a role in this connection.

WEIGHT CHANGES DURING STRESS:

People with high BMIs have a higher correlation between chronic stress and weight gain than do people with low BMIs who experience comparable levels of stress. This idea is supported by the fact that stress-related eating is strongly linked to obesity in women. Additionally, overweight and obese people seem more sensitive to food signals, especially after experiencing stress.

OVER EATING DURING STRESS:

Stress refers to mental and physical reactions to unpleasant events or stimuli that involve observation, evaluation, and response. Interpersonal disagreement, losing a loved one, and being unemployed are just a few examples of stressful situations that can be difficult on an emotional or physiological level. In addition, using addictive drugs often or binge-wise may act as a pharmacological stressor. Acute stress triggers adaptive responses, but persistent stress causes the regulatory systems to wear and tear (allostatic load), which results in biological changes that decrease stress-related adaptive mechanisms and raise disease vulnerability. Therefore, somewhat demanding stimuli that are brief in duration can be "good stress" or "eustress" and may promote the desire to attain goal-direct outcomes and homeostasis; this can lead to a sense of mastery and achievement and can be viewed as thrilling and joyful. However, the sensation of control and flexibility decreases with the duration and intensity of the stressful circumstance, increasing the stress response and the danger of long-term homeostatic dysregulation. The feeling of discomfort is influenced by a variety of factors, including personality characteristics, emotional states, and physiological reactions. These factors all play a role in how stress is perceived and assessed. Stress is also dependent on particular elements of the external or internal stimuli that are present. Food consumption under stress has been linked to cognitive constraint, with highly restricted eaters increasing and uncontrolled eaters lowering their food intake.

SLEEP DEPRIVIATION DURING STRESS:

Sleep deprivation is a frequent kind of chronic stress that may raise the risk of obesity and metabolic illnesses such as abdominal obesity, insulin resistance, hypertension, and atherosclerosis, which may predispose people to cardiovascular disease and type II diabetes. The average American adult sleeps fewer than 6 hours a night, according to estimates.

Individual variances in food intake responses are also observed in humans; around 40% of people increase and 40% reduce their calorie intake while under stress, whereas 20% of people do not alter their feeding habits at all.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

e-ISSN : 2583-1062

Impact Factor : 5.725

www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

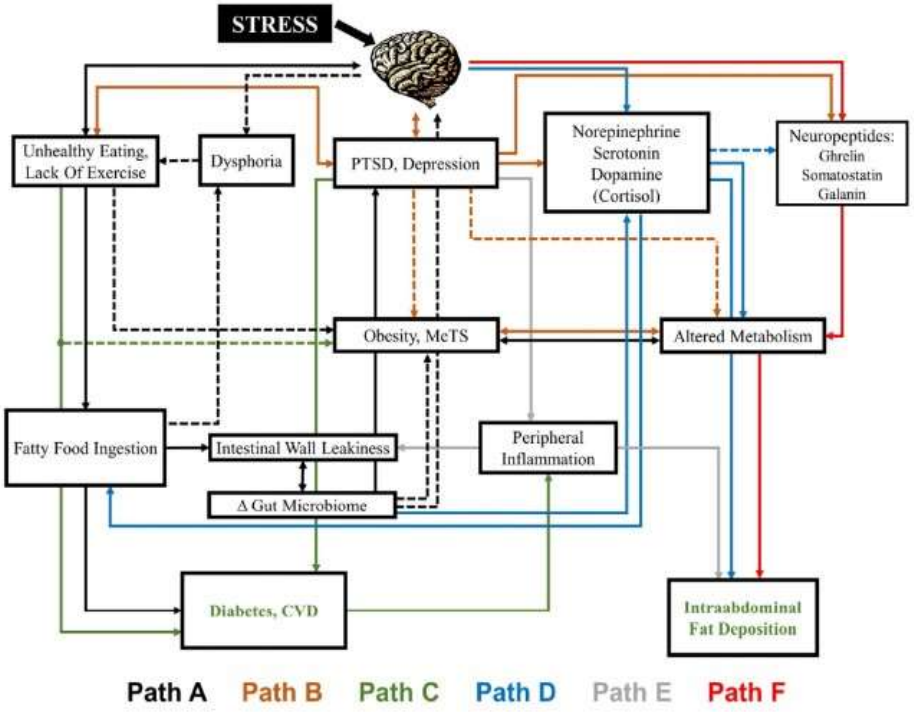


Figure 1: The intricate link between nutrition, obesity, and behaviour. Stress affects eating and exercise habits through the brain (Path A) and stress-related psychiatric disorders like posttraumatic stress disorder (PTSD) and depression (Path B), both of which can result in changes in metabolism, metabolic syndrome (MetS), and obesity (Paths A and B). Depression (Path B) and post-traumatic stress disorder (PTSD), both of which can result in modifications in obesity (Paths A and B), metabolic syndrome (MetS), and metabolism.Unhealthy eating, PTSD, and depression have binary interactions with the brain as well; both conditions alter how the brain functions. Poor eating habits can lead to diets high in saturated fat (consuming fatty foods) (Path A) that can affect mood (dysphoria), as well as leakiness of the intestinal wall (Path A) that can cause changes in the gut microbiome that can modulate obesity, MetS, and metabolism (Path A), as well as feeding back on the brain (Path A) to influence mood (dysphoria). Stress affects physical conditions including PTSD and depression as well as physical aspects like intra-abdominal fat (Path C), diabetes, and cardiovascular disease (CVD).

A complex system of neurotransmitters (norepinephrine, serotonin, and dopamine) (Path D), inflammatory markers (Path E), and neuropeptides (ghrelin, somatostatin, and galanin) (Path F) present in the gut and brain is also influenced by stress via the brain, influences the gut microbiota and physical disorders and factors in a binary fashion, and in turn regulates both feeding behaviour and psychiatric disorders. In the illustration, the path is denoted by the colour of the lines, with dashed lines denoting principal paths and solid lines denoting secondary pathways.

OBESITY AND STRESS:

The majority of individuals in the US are overweight or obese, which raises their risk of developing type 2 diabetes, high blood pressure, and heart disease. Obesity is a significant cause of preventable deaths in the United States and can increase the morbidity risks of chronic diseases including hypertension, stroke, respiratory issues, and different malignancies. Additionally, studies link stress to eating. Despite the fact that under stress, people's bodies retain more fat than when they are at ease, people have a tendency to turn to high-calorie, high-fat foods. While there are numerous reasons that contribute to the nation's weight issues, the Stress in America study reveals that stress affects our eating behaviours.

CRAVINGS DURING STRESS:

In reaction to rest and stress circumstances, healthy lean individuals' mean energy intake and food cravings reduced even when they weren't hungry, according to a recent study. While under stress compared to rest, viscerally overweight participants had increased mean food cravings and energy intake of hyperpalatable foods (such as desserts and snacks), possibly as a method to control and reduce stress.

Short sleep duration has been linked to a greater prevalence of obesity or a higher BMI in both adult and child populations, according to cross-sectional research.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

e-ISSN : 2583-1062

Impact Factor : 5.725

www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

3. AIMS AND OBJECTIVES

The purpose of this study was to investigate:

- To compare the ratio between healthy and non- healthy eating among individuals with stress.
- To Assess the nutritional consequences of changes in dietary habits due to stress.
- To Investigate how different cultures and societies respond to stress through dietary choices.
- To Identify figures that contribute stress.
- To learn skills for maintaining healthy life style

4. REVIEW OF LITERATURE

1. Grogan. C.S. (2002) hypothesised that women's intentions to consume sweet snacks were predicted by their perceptions of social pressure and attitudes towards them. Only attitudes were a reliable predictor of men's intentions. According to the findings, societal pressure has a smaller impact on men's sweet eating than it does on women.
2. Gendal. A. K, joyce . R.P.(2001) Suggest that the "core features" or "features of intensity" were the characteristics that were most closely associated with the intensity of the hunger, such as difficulty avoiding eating, anxiety when the meal was not accessible, and a change in the rate of intake. 86% of strong cravers had at least two of the fundamental characteristics, compared to 48% of moderate and 10% of light cravers. Studies on food cravings should take these characteristics into account, as they may help define the seeking condition.
3. Michels. N; henauw. D.S. (2012) investigated a Positive correlations between difficulties and eating sugary or fatty meals have been shown. Events and the eating of fruits and vegetables were shown to be negatively correlated. Overall, stress was linked to emotional eating and a more harmful dietary pattern, which may help cause obesity, including in youngsters.
4. Oliver.G. (2009) Examined the majority of respondents claimed that stress had an impact on how much they ate overall, but when they were snacking, almost equal proportions claimed that their consumption had reduced (42%) or risen (38%). Dieting status might be used to predict the direction of change in intake, with dieters more likely to report stress hyperphagia and non-dieters more likely to report stress hypophagia.
5. Torres. J.S. (2007). Suggest Evidence from longitudinal studies indicates that men are more likely to experience the negative effects of chronic life stress than women. Obesity development may be influenced by a number of factors, including stress-induced eating.
6. Kim. K.H, Kim. J.H. (2009) suggested that one element influencing the onset of obesity may be stress-induced eating. Women are more likely to use food as a coping mechanism for stress than men, who are more likely to turn to smoking or drinking. This gender-specific reaction to stress has been observed. Individual (52.9%), social (50.7%), family relationships (34.5%), work responsibilities (34.2%), and physical environment (32.3%) were identified as the main categories of stress. Anxiety (38.3%), headaches (36.7%), and neck or shoulder pains (36.2%) were the individuals' stress-related symptoms, and women reported having more of these symptoms than men.
7. Kandiah. J; jones.j. (2006) reveals that there was no relationship between changing appetite under stressful and regular circumstances and age. Only 33% of those who reported eating healthily when under stress reported doing so, compared to 80% (n = 218) who said they did so under normal circumstances
8. Macht. M. (2005) suggests that field research utilising a control group design with a pre- and posttest was conducted to assess changes in eating behaviour in response to a real-life stressor. Students who were getting ready for a test reported feeling more emotional tension and having a greater desire to eat to relax. Results show that eating is a common way for students to regulate their emotions under stressful circumstances, with distraction serving as a potential mediating factor.
9. Mckinzie. C.(2006) suggests that stress was significantly correlated with and predicted by sleep patterns, exercise routines, and bad moods.

5. METHODOLOGY

A cross sectional evaluated data collected in 2022 from 75 adult male and female from Islamabad and Rawalpindi to identify gaps. My study was in questionnaire form.

I collected sample of 75 adults which comprises of 80% female and 20% males.

Table:1

MALES	FEMALES
20%	80%

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

e-ISSN : 2583-1062

Impact Factor : 5.725

www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

Table no. 02:

Indicators	$\bar{x}$ ± S.D
PA	1.20 ± .88
AS	0.73 ± 0.57
AYS	2.38 ± .67
RA	1.68 ± 1.23
UUE	1.49 ± 1.07
UCIT	1.68 ± 1.01
NS	1.34 ± .97
CI	1.52 ± .87
SE	1.86 ± 1.03
SF	2.32 ± 0.87
JF	1.84 ± 1.15
SM	1.37 ± 1.18
SHM	1.41 ± 1.18
BE	2.16 ± .98
WDS	1.66 ± 1.14

Table 1: This show the co-occurrence of mean and std. deviation in each indicator of disordered food intake. This show the relation between data with mean and standard deviation. Abbreviations; PA (physical activity), AS (activity status), AYS (addiction in yourself), RA (rate addiction), UUE (upset unexpectedly), UCIT (unable to control important things), NS (nervousness and stress), CI (control irritations), SE (stress eating), SF (sugary foods), JF (junk foods), SM (skip meals), SHM (skip healthy meals), BE (binge eating), WDS (working deadline snack).

6. RESULTS AND DISCUSSIONS:

Obesity and food can directly affect mood, and stress-related mental illnesses may cause people to make dietary choices that have an impact on their weight. In contrast, common variables like stress or genetic predisposition might cause both obesity and stress-related mental diseases, including depression and posttraumatic stress disorder (PTSD). There are efforts to evaluate polyunsaturated fats (PUFA) as a therapy for depression since some dietary components might cause abrupt changes in mood and increase inflammation.

Between these several elements, there are also probably bidirectional interactions.

Finally, there has been a rise in interest in the connection between the gut and the brain recently because of the discovery that the gut microbiota affects brain function as well as mood and behaviour. This opens up yet another area where nutrition might affect mental health and diseases. The brain regions, neurotransmitters, and neuropeptides associated with mood and hunger are probably involved in mediating this link.

TABLE NO. 01: DIFFERENT STUDIES

COUNTRIES	AUTHORS	YEARS
Karachi	Babar A shaikh hamza Khalid	2004
Rawalpindi	Tayyab Mumtaz khan Somia Bibi	2020
Karachi	Hasan Raza Rushna Raza	2018
Karachi	Urooj Bhatti Hina Riaz	2022
Pakistan	Ahmad Ali Muhammad Shoaib	2021
Bahawalpur	Zain Ul Abbadin Abdul Latif	2011
Gujrat	Muhammad Irfan Mudasir Zafar	2018

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

e-ISSN : 2583-1062

Impact Factor : 5.725

www.ijprems.com
editor@ijprems.com

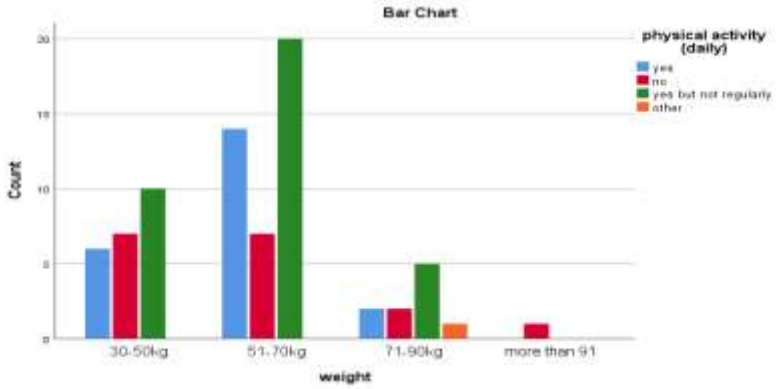
Vol. 03, Issue 09, September 2023, pp : 350-361

TABLE NO. 02: ASSOCIATION OF WEIGHT WITH DIFFERENT INDICATORS

INDICATORS	P- VALUE	ASE VALUE	R- VALUE
PA	.71	.10	.69
AS	-0.65	.12	-.05
AYS	-.13	.12	-.058
RA	-.18	.10	-.15
UUE	.081	.10	.11
UCIT	-.029	.10	-.01
NS	-.08	.11	-.06
CI	-.25	.09	-.27
SE	-.21	.11	-.17
SF	-.25	.10	-.26
JF	-.11	.10	-.13
SM	-.04	.11	-.04
SHM	-.12	.11	-.09
BE	-.16	.09	-.16
WDS	-.08	.11	-.11

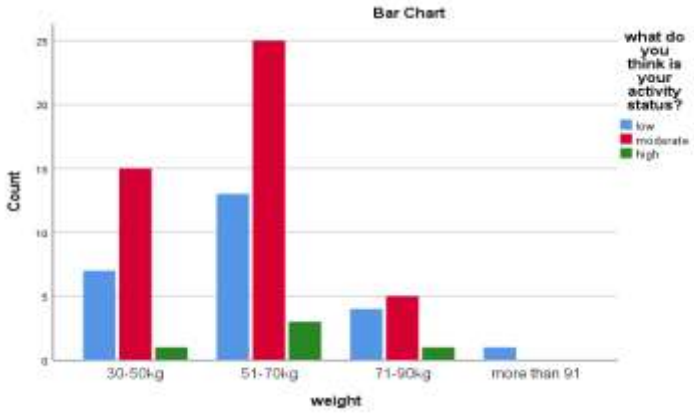
1. PA

GRAPHS/ CHARTS:



Graph no. 01: this shows that 50-70kg weight adults are doing physical activity daily. The orange colour shows that 71-91kg and more than 91kg are doing least physical activity.

2. AS



Graph no. 02: this shows that the activity status of 51-70 kg weight adults is highest. And least is done by more than 91 kg adults. 30-50kg adults are doing average physical activity.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

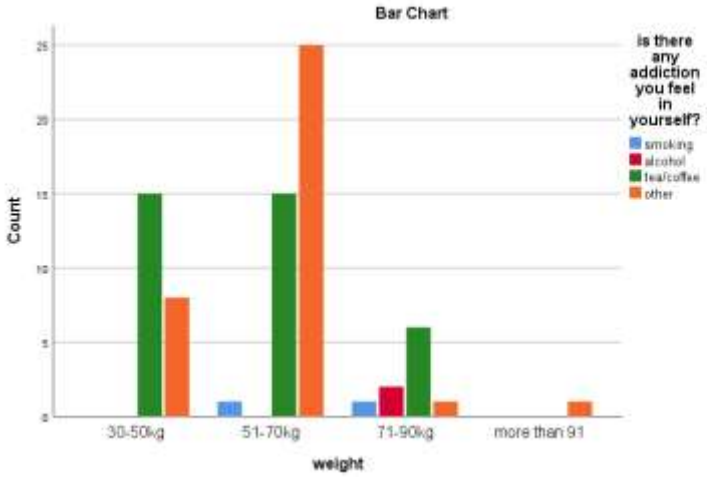
e-ISSN : 2583-1062

www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

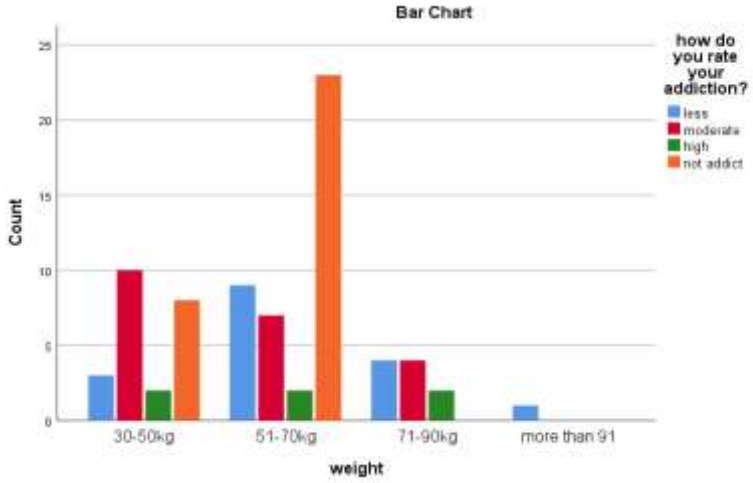
Impact Factor : 5.725

3. AYS



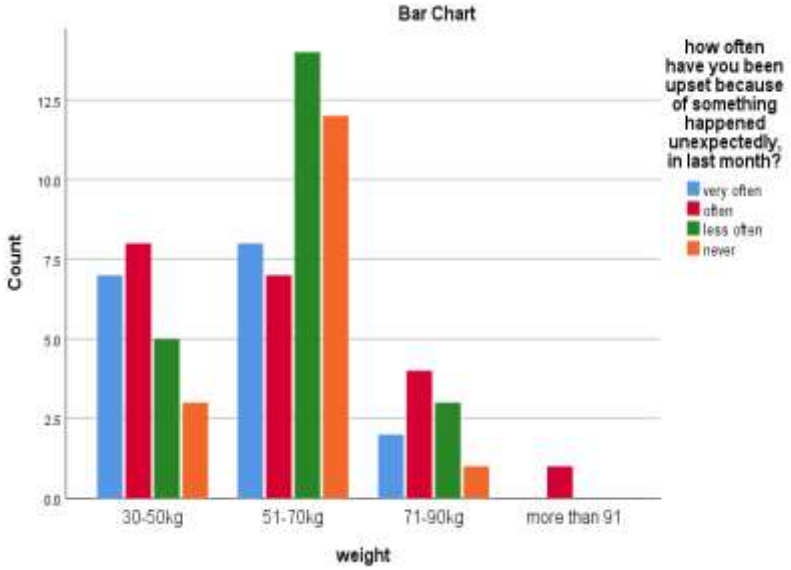
Graph no. 03: this shows that 51-70 kg people are addicted to other things. The average addiction of tea/coffee is in 30-50kg and 51-70kg people.

4. RA



Graph no. 04: this shows that 51-70kg people are mostly not addicted and more than 91kg weight people are less addicted.

5. UUE



Graph no. 05: this shows that 51-70kg weight people are less often upset in last month. The average ratio of 30-50kg weight people were upset in last month

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

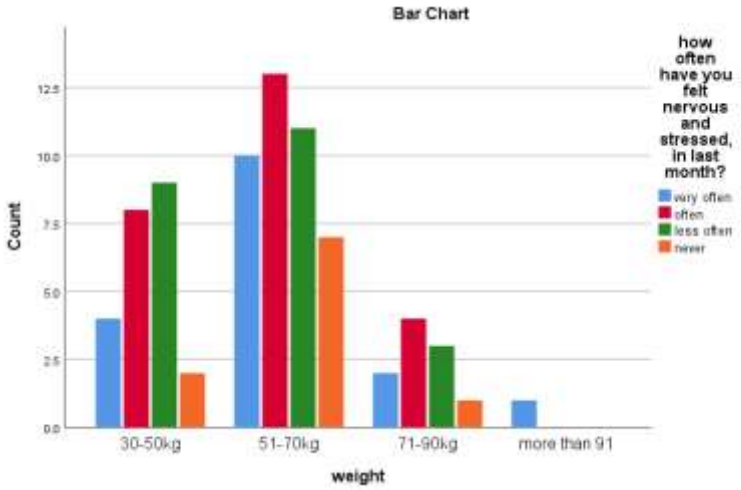
e-ISSN : 2583-1062

www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

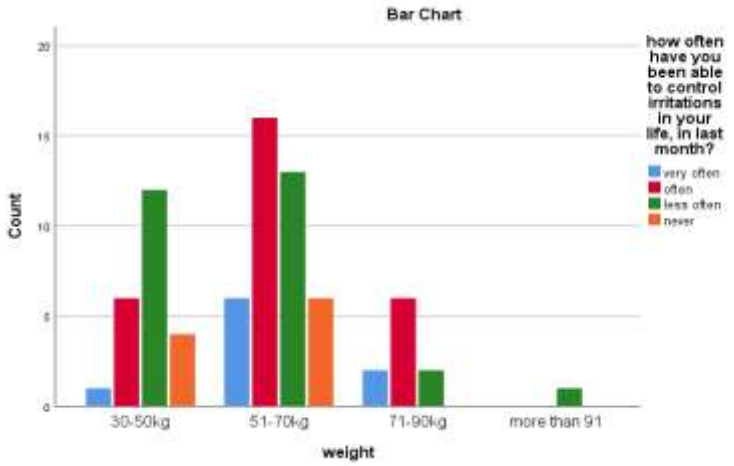
Impact Factor : 5.725

6. NS



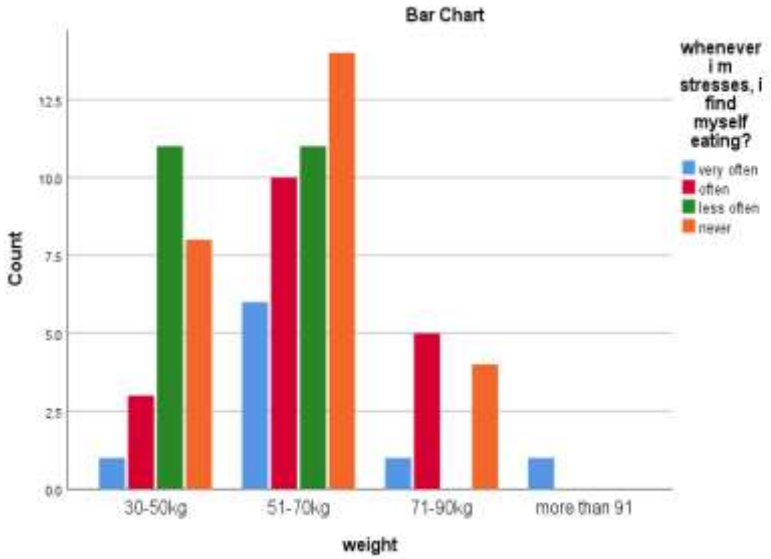
Graph no 06: this graph shows that 51-70kg weight people are often nervous and stressed in last month and 71-90kg weight people were never stressed in last month.

7. CI



Graph no. 07: this shows that 51-70kg weight people were often able in controlling their irritations in last month and more than 91kg weight are less often to control irritations in last month.

8. SE



Graph no. 8: this shows that 51-70kg weight people never stressed eat more ans 30-50kg weight people are doing stress eating.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

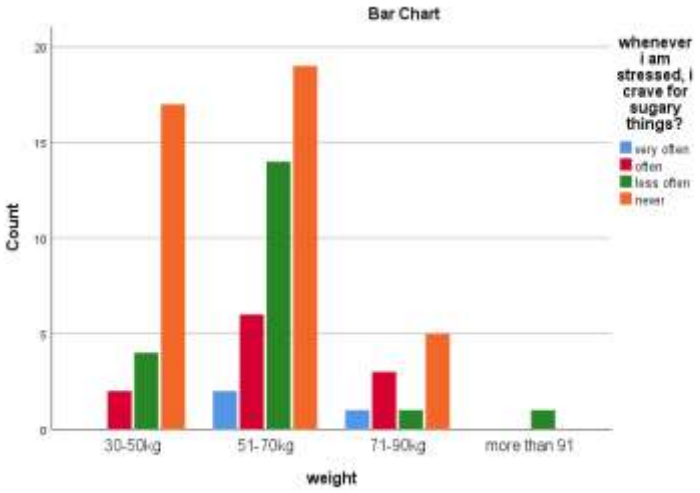
www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

e-ISSN : 2583-1062

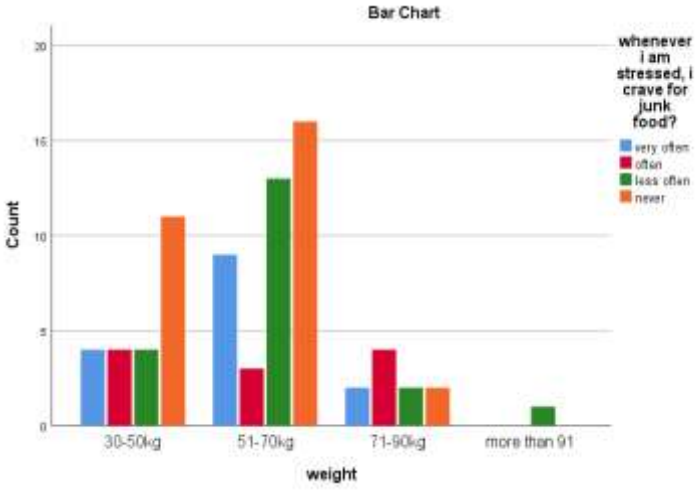
Impact Factor : 5.725

9. SF



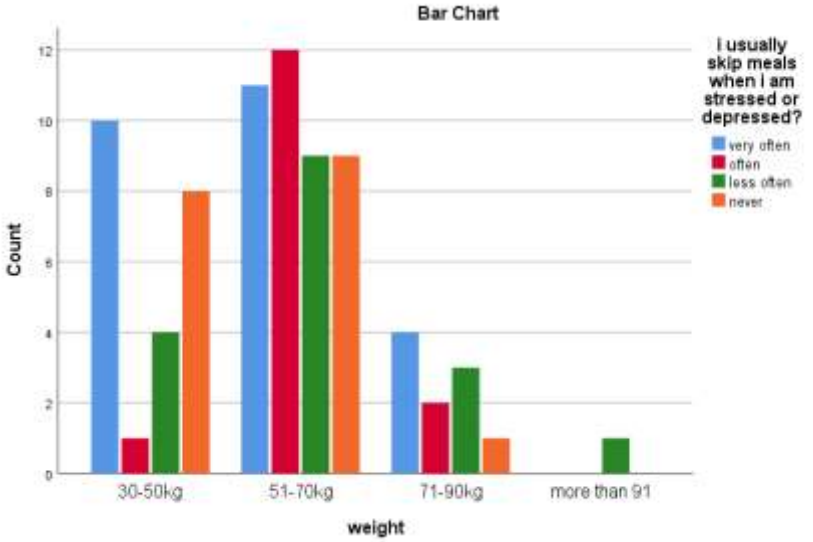
Graph no. 09: this shows that 51-70kg weight people never eat sugary food during stress and more than 91kg weight people less often eat sugary foods.

10. JF



Graph no. 10: this shows that 51-70kg weight people never eat any junk food during stress and average number of 31-50kg weight people eats junk food during stress. More than 91kg weight people less often eat.

10. **SM**



Graph no 11: this graph shows that 51-70kg weight people often skip meals when they are stressed. The lowest ratio is in 71-90kg weight people who never skip meals during stress.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

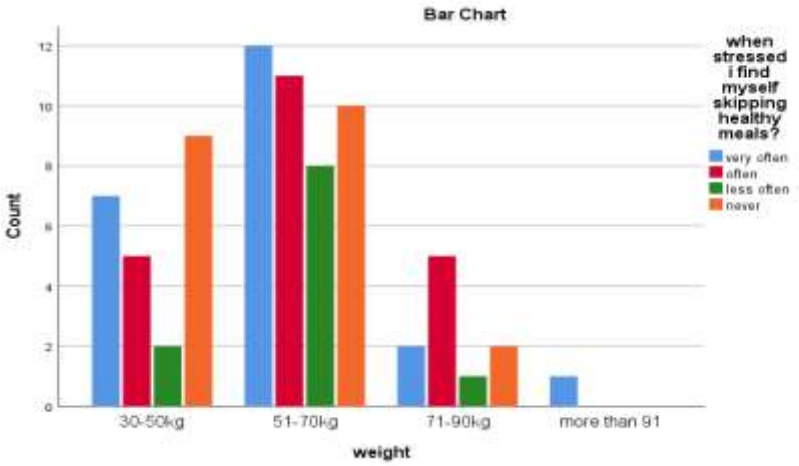
e-ISSN : 2583-1062

www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

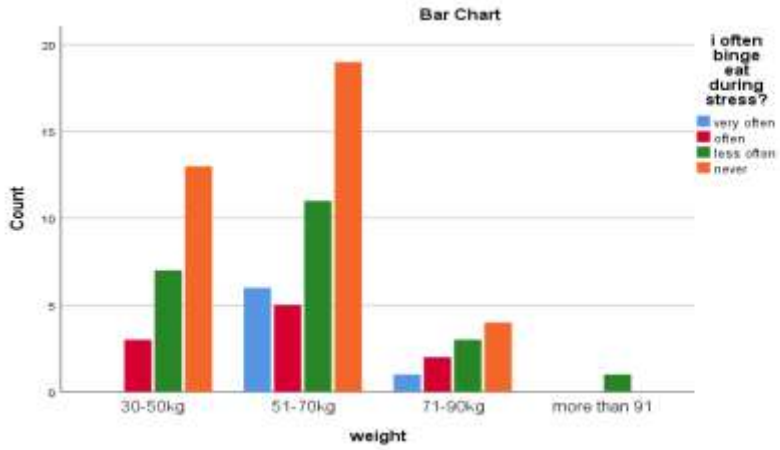
Impact Factor : 5.725

11. **SHM**



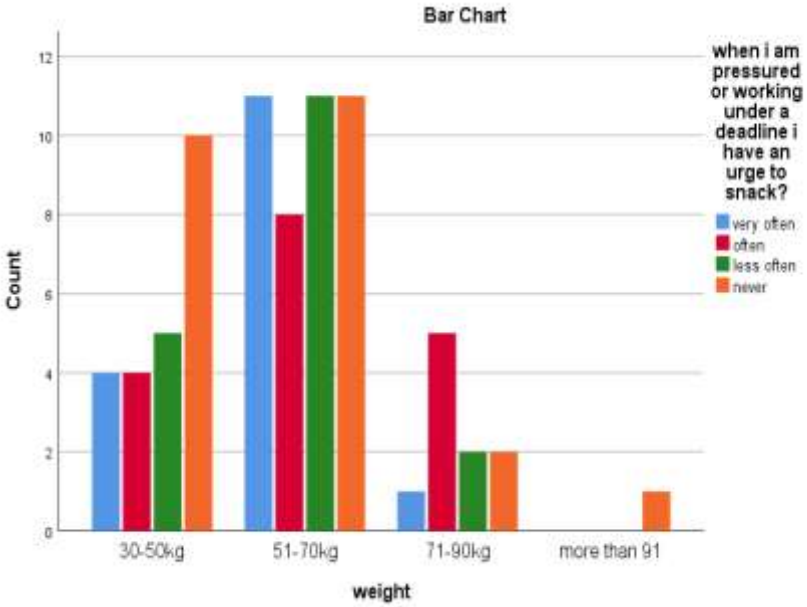
Graph no. 12: this graph shows that 51-70kg weight people skip healthy meals very often during stress. 71-90kg weight people less often skip healthy meals during stress.

12. **BE**



Graph no. 13: this shows that 51-70kg weight people never binge eat during stress. And more than 91kg weight people are doing it less often.

13. **WDS**



Graph no. 14: this shows the same ratio of people in same weight pattern who very often, less often and never have an urge of snack when worked under pressured.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

e-ISSN : 2583-1062

Impact Factor : 5.725

www.ijprems.com
editor@ijprems.com

Vol. 03, Issue 09, September 2023, pp : 350-361

TABLE NO. 03: DESCRIPTIVE STATISTICS

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
age * is there any disease in your family?	75	100.0%	0	0.0%	75	100.0%
age * are you currently suffering from any disease?	75	100.0%	0	0.0%	75	100.0%
age * physical activity(daily)	75	100.0%	0	0.0%	75	100.0%
age * what do you think is your activity status?	75	100.0%	0	0.0%	75	100.0%
age * is there any addiction you feel in yourself?	75	100.0%	0	0.0%	75	100.0%
age * how do you rate your addiction?	75	100.0%	0	0.0%	75	100.0%
age * how often have you been upset because of something happened unexpectedly, in last month?	75	100.0%	0	0.0%	75	100.0%
age * how often have you felt that you were unable to control the important things in life, in last month?	75	100.0%	0	0.0%	75	100.0%
age * how often have you felt nervous and stressed, in last month?	75	100.0%	0	0.0%	75	100.0%
age * how often have you felt confident about your ability to handle your personal problems, in last month?	75	100.0%	0	0.0%	75	100.0%
age * how often have you felt that things were going your way, in last month?	75	100.0%	0	0.0%	75	100.0%
age * how often have you been able to control irritations in your life, in last month?	75	100.0%	0	0.0%	75	100.0%
age * how often have you felt that you were on the top of thing, in last month?	75	100.0%	0	0.0%	75	100.0%
age * how often have you been angered because of things that happened and were out of your control, in last month?	75	100.0%	0	0.0%	75	100.0%
age * how often have you felt that difficulties were pilling so high that you could not overcome them, in last month	75	100.0%	0	0.0%	75	100.0%
age * whenever i m stresses, i find myself eating?	75	100.0%	0	0.0%	75	100.0%
age * whenever i am stressed, i crave for sugary things?	75	100.0%	0	0.0%	75	100.0%
age * whenever i am stressed, i crave for junk food?	75	100.0%	0	0.0%	75	100.0%
age * i usually skip meals when i am stressed or depressed?	75	100.0%	0	0.0%	75	100.0%
age * when stressed i find myself skipping healthy meals?	75	100.0%	0	0.0%	75	100.0%
age * i often binge eat during stress?	75	100.0%	0	0.0%	75	100.0%
age * when i am pressured or working under a deadline i have an urge to snack?	75	100.0%	0	0.0%	75	100.0%

7. CONCLUSION

This conclude that the people in their period of stress suffer from two types of eating disorders in cluding high caloric diet and appetite loss that leads to weight loss. People prefer certain types of diets in their stress periods, this leads to poor nutrient absorption or excessive fat absorption in body stores which leads to stress about body image including cognitive and perceptual thoughts. Understanding how nutrition, stress, mood, and behaviour are connected may have significant effects on how stress-associated mental problems and obesity are treated.

8. REFERENCES

[1] Sitoayu, L., Purwara Dewanti, L., Melani, V., Azahra Sumitra, P., & Rulina Marpaung, M. (2023). Differences in Eating Habits, Stress, and Weight Changes Among Indonesian Generations Y and Z Students During the COVID-19 Pandemic. Journal of Research and Health, 13(2), 79-86.

[2] GROGAN.C.S.(2002).”eating sweet snacks”. Journal of appetide . 28(1), 19-31.

[3] Allam, V. S. R. R., Paudel, K. R., Gupta, G., Singh, S. K., Vishwas, S., Gulati, M., ... & Dua, K. (2022). Nutraceuticals and mitochondrial oxidative stress: Bridging the gap in the management of bronchial asthma. Environmental Science and Pollution Research, 29(42), 62733-62754.

[4] Kivipelto, M., Mangialasche, F., Snyder, H. M., Allegri, R., Andrieu, S., Arai, H., ... & Carrillo, M. C. (2020). World-Wide FINGERS Network: a global approach to risk reduction and prevention of dementia. Alzheimer's & dementia, 16(7), 1078-1094.

[5] Bremner, J. D., Moazzami, K., Wittbrodt, M. T., Nye, J. A., Lima, B. B., Gillespie, C. F., ... & Vaccarino, V. (2020). Diet, stress and mental health. Nutrients, 12(8), 2428.

[6] Feder off. D. C.I: Joyce. R.P.(2001)”The eating behaviour of restrained and unrestrained eaters”. Journal of appetide. 28(1), 33-47.

[7] Husain, W., & Ashkanani, F. (2020). Does COVID-19 change dietary habits and lifestyle behaviours in Kuwait: a community-based cross-sectional study. Environmental health and preventive medicine, 25, 1-13.

[8] Gental. A. K; Joyce. R.P. (2001).“prevalence of food cravings”. Journal of appetide. 28(1), 63-72.

[9] Michels. N; Henauw. D.S.(2012). ”Stress, emotional eating behaviour in children”. Journal of appetide. 59(3), 762-769.

[10] Kim. H. K; Kim. J.H(2009). “relationship between stress and eating habits in adults”. Korean Journal of nutrition. 42(6), 536-546.

[11] Oliver. G.(2009). “perceived effects of stress on food choice”. Journal of physiology and behaviour. 66(3), 511-515.

[12] Torres. J.S.(2007). “relationship between stress, eating behaviour and obesity”. Journal of nutrition. 23(11-12), 887-894.

[13] Kandiah.J; jones.j. (2006),”stress influences appetide and comfort food”. Journal of nutrition research. 26(3), 118-123.

[14] Macht. M. (2007). “the perceives function of eating is changed during stress”. Journal of eating behaviours. 6(2), 109-112

[15] Mkinzie. M.(2006). ”Effect of stress on mood”. Journal of psycological reports. 99(2). 439-448.