



## ***Awareness About Nutrition and Fitness Among Women: A Case Study of Punjab***

**Ms. Arshpreet Kaur**

Ph.D. Research Scholar,

Department of Public Administration,  
Punjabi University Patiala, Punjab, India

**Mr. Sapinder Singh**

PGD in Health Fitness Trainer,

Department of Sports Science,  
Punjabi University Patiala

### **ABSTRACT**

“Health is wealth”, to enjoy the pleasures of life one must have good health. Healthy people make a healthy nation. Good health is essential for human welfare and sustained economic and social welfare. Traditionally good health is viewed merely as the absence of disease. The World Health Organisation (WHO 1946) definition of health is “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”.

A healthy diet is important for women because the multiple roles that they play as a mother, sister, wife and primary caretaker can be possible if their own nutrient requirements are met and they are healthy enough to sustain themselves. A balanced diet is a must to ensure appropriate nutrient requirements that they have to consume including both macronutrients and micronutrients. Particular attention needs to be paid to protein, calcium, iron, vitamins, fatty acids and fluids. Improving women’s nutrition also helped nations to achieve three of the Millennium Development Goals including; a) Goal #1: Eradicate extreme poverty and hunger, b) Goal #4: Reduce child mortality, & c) Goal #5: Improve maternal health. which are commonly accepted as a framework for measuring development progress. Further Sustainable Development Goals also highlighted it in its goals including; Goal #2 Zero hunger and Goal #3 Good health and wellbeing.

**Keywords:** Nutrition Awareness, Fitness awareness, importance of health, awareness among women



## INTRODUCTION

“Health is wealth”, to enjoy the pleasures of life one must have good health. Healthy people make a healthy nation. Good health is essential for human welfare and sustained economic and social welfare. Traditionally good health is viewed merely as the absence of disease. Generally one who has a strong built and muscular body is considered to be healthy. The World Health Organisation (WHO 1946) definition of health is “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. Health is composed of multitudinal dimensions such as physical health, mental health, social health and emotional health.

Physical, psychological, emotional, spiritual, environmental, genetic and social factors all participate to influence the degree or status of health of an individual. All these factors must be taken into account in order to achieve optimal levels of health. Furthermore, Fitness can be defined as the ability to meet the demands of a physical task.

*\*This research paper was presented in the panel T20P07 (GOVERNING CRISIS) of 6th International Conference on Public Policy (ICPP6 Toronto) from June 27 to 29, 2023 organized by International Public Policy Association (IPPA)*

A healthy diet is important for women because the multiple roles that they play as a mother, sister, wife and primary caretaker can be possible if their own nutrient requirements are met and they are healthy enough to sustain themselves. A balanced diet is a must to ensure appropriate nutrient requirements that they have to consume including both macronutrients and micronutrients. Particular attention needs to be paid to protein, calcium, iron, vitamins and fluids.

A quarter of women of reproductive age in India are undernourished, with a body mass index (BMI) of less than 18.5 kg/m (Source: NFHS 4 2015-16 ). It is well known that an undernourished mother inevitably gives birth to an undernourished baby, perpetuating an intergenerational cycle of undernutrition.



## **HEALTH AND FITNESS AMONG WOMEN: AN OVERVIEW**

**Physical activity for women:** It is important to do regular physical exercise or activity to attain good physical and mental health. As physical activity helps in improving the overall health and fitness level of an individual. According to the guidelines provided by the physical activity and sedentary behavior guidelines of Australia, it is recommended to do moderate-intensity physical activity for at least 30 minutes on all the days of a week to attain good health and fitness.

There are certain barriers that women face to meet with physical exercise recommendations. This can include family responsibilities, household work, body image prevalent in society and other assumptions regarding safety.

The motivating factors behind doing regular exercise by women includes managing weight, improving their fitness level, having ‘Me Time’ and lastly to have fun or a recreational activity.

The common reasons that emerge as the hindrance for doing regular exercise includes:

- Not having enough time
- Not having enough motivation
- Due to some health problems
- Household responsibilities
- Monetary Limitations.

### **Physical activity through incidental exercise:**

Your lifestyle can aid you in increasing physical activity level with some minor changes done by you this includes:

- Waking instead of using vehicles for short trips. For short trips walk instead of taking the car.
  - Play activity with your children. Doing some physical activities as part of playing with children.
-



- Listen to your favourite music or the radio and dance around the house. Dancing on the tunes of your favourite songs.
- Do things yourself instead of using labour-saving machines. Planning some activities for the whole family to keep another motivated.
- Get the whole family active on the weekends. The range of free activities is only limited by your imagination but could include bushwalking, cycling around the neighbourhood, swimming at the beach or playing backyard cricket.

### **Women's Nutritional Needs:**

Women's nutritional needs are dynamic i.e. during menstruation, pregnancy, breastfeeding and menopause. With the popularity of crash dieting globally especially on social media, nutritional deficiencies are common, especially among young women. A balanced diet ensures proper nutrition as it provides a wide variety of foods, if consumed everyday than can help drastically.

### **Nutrition and premenstrual syndrome (PMS)**

A woman's menstrual cycle affects her body and state of mind as changes in hormones throughout the cycle. Before the menstruation cycle begins usually the energy requirements increase and food cravings are common on the advent of periods.

### **Iron and Anaemia**

Iron is a mineral that works with other substances to create hemoglobin, the compound that carries oxygen in the blood. Women and men metabolise iron from food at roughly the same rate. Women need upto 18 mg (or 27mg if pregnant) whereas men only require 8 mg of iron in their daily diet.

The most common nutrient deficiency found in women is deficiency of iron. Lack of iron consumption leads to anaemia. Tiredness and breathlessness are common symptoms of anaemia among women. The requirement of iron is rather important for women during pregnancy.

### **Sources of Iron for consumption includes:**



- Red meat, chicken and fish
- Fortified cereals i.e. cereals with added iron
- Legumes and nuts
- Leafy green vegetables

Eating healthy is important to meet the nutritional needs of the developing individual's own well being.

### **Calcium**

Although a developing baby needs a lot of calcium, physiological changes during pregnancy help to protect the mother's bones, so there is no need for extra dietary calcium during pregnancy.

The process of thinning of bones to such extent that they become weak and fragile is known as Osteoporosis. Women are generally more prone to developing Osteoporosis than men.

Good sources of calcium include milk, cheese, yoghurt and fish with edible bones.

### **Zinc**

This nutrient is needed to maintain the health of cells. Sometimes, women consume iron supplements that can interfere with the absorption of Zinc by the body. So, women should consume Iron-rich foods as these are also a good source of Zinc rather than relying on supplements.

### **Iodine**

Iodine is a vital nutrient for women especially during pregnancy is required for proper mental development of the baby. But, it is difficult to get enough Iodine from food. To increase Iodine intake you can incorporate Iodised salt, sea-food or taking recommended multivitamin supplements.



## **Vitamin C**

The best natural sources of vitamin C are the citrus fruits such as oranges , citrine , mosambi ,tangerine etc . The other sources include papaya , strawberries , red capsicum and broccoli etc.

## **Calcium and osteoporosis**

**The process of thinning of bones to such an extent that they become weak and fragile is known as osteoporosis . Women are generally more prone to developing osteoporosis than men.**

### *Vitamin D and calcium*

**Vitamin D is a vital vitamin as it helps in proper absorption of calcium by the body to maintain bone metabolism. There is a greater risk of vitamin D deficiency among women who have really dark skin or generally have low rates of sunlight exposure. For example, those women who cover their body mostly when they are outdoors, work longer daytime shifts indoors, and who stay mostly inside their residential building are more likely to be detected with such deficiency. Other reasons can be some medical conditions or effects of some medications.**

**The main and cheapest source of vitamin D is sunlight . the dietary source of vitamin D includes: margarine, eggs and oily fish.**

Women who have naturally very dark skin and have very low exposure levels of sunlight are at greater risk of vitamin D deficiency . Women who tend to cover most of their body when they are outdoors can also develop vitamin D deficiency.

Points to be taken care of by women regarding their nutrition:

1. Women tend to consume less dietary iron and calcium than they actually require .
  2. The dietary requirements of women change with the phase of their life i.e. during adolescence ,menstruation ,pregnancy , breastfeeding and menopause the nutritional demands change.
-



3. A wide variety of food incorporated in routine helps in achieving good nutrition .
4. Over consumption of certain food such as tea, caffeine , alcohol and salt can lead to certain problems such as absorption and excretion of important minerals by the body.

### **Women and mental health in India**

There is obvious differences that can be observed between men and women however they also differ in their psychological makeup also ,researches over the time have found that there are evident difference how the women and men's brain work or structured .the stimuli and way of processing information and reaction to an event is also different due to the above mentioned difference subsequently there is variation in the communication , expression of feelings ,dealing relationships and reaction to stress etc. There are various attributes such as physical, physiological, and psychological which lay down the foundation of gender differences. There are some psychological theories that show a gender sensitive viewpoint known as alpha bias, and there are others that are gender neutral representing beta bias. Alpha bias assumes that men and women are different and opposite, and in beta bias differences between men and women are ignored. Alpha bias could be rooted more in the social conditioning and power structure in the societies. Gender roles have been prevalent in prehistoric culture all the way to more civilised societies which are generally based on the culture prescription .

The role of women in the early hunter -gatherer societies was more of a gatherer i.e. they used to gather plant based food , fish, small animals food and also learned to use dairy products whereas the men used to hunt meat from bigger animals. Now -a-days these gender roles of the women in society have changed drastically .

Women belonging to middle class strata were mainly involved in doing domestic tasks whereas the poorer women sought employment outside their home due to their economic situation. But the work that they get is however to pay them lower wages and further lead to exploitation.



---

## ***MENTAL HEALTH AND MENTAL DISORDERS***

---

An absence of a mental disorder and existence of emotional and cognitive well being can be described as mental health . The discipline of positive psychology explains mental health as an ability of an individual to enjoy life and being able to maintain balance between life activities and efforts to achieve psychological resilience . However ,mental disorder is an involuntary change in pattern of behaviour of an individual and it causes distress and results in a hindrance to normal development of an individual.

Gender of an individual is a crucial determinant of one's mental illness and mental health. The death rate associated with mental illness has grabbed more attention than the gender specific factors and ways that promote and protect mental health and foster resilience to stress and adversity among individuals.

According to various mental health indices and research it has been revealed that psychiatric disorder and psychological distress among male and females are different . The symptoms of depression , anxiety and unspecified psychological distress are much more common among women as compared to men . The differences between men and women are further observed by many researchers and psychologists .The rate of spreading of mental distress in females and male is different as is the average standings of imperceptible internalising and externalising liabilities dimensions. Males show a higher mean level of externalising while females show a higher level of internalising .

### **WOMEN'S MENTAL HEALTH: THE FACTS (WORLD HEALTH ORGANISATION REPORT, 2001)**

- Depressive disorders account for approximately 41.9 percent of the disability from neuropsychiatric disorders among females compared to 29.3 percent among males.
- Leading mental health problems of the elderly are depression, organic brain syndromes, and dementias. A majority are women
- An estimated 80 percent out of 50 million people affected by violent conflicts, civil wars, disasters, and displacement are women and children





- Lifetime prevalence rate of violence against women ranges from 16 percent to 50 percent
- At least 1 among 5 women suffers rape or attempted rape in their lifetime.

## COMMON MENTAL DISORDERS

Gender differences can be observed in some of the common mental disorders (CMDs) such as depression ,anxiety ,and somatic complaints wherein females are the most affected . The second leading cause of global disability burden in 2020 was unipolar depression , which is twice as common in women than men . Further , Females are 2 to 3 times more at risk of anxiety disorder as compared to males.

Depression is the most common mental health problem ,Although both men and women have similar depressive symptoms but women are more likely to show reverse vegetative symptoms including increased appetite and weight gain more likely to show greater intensity of symptoms than men in the case of anxiety disorders.

Various studies related to mental health in India have shown the CMD are strongly related to the female gender beside poverty. Further it has been revealed that women are 2 to 3 times more likely to be affected by CMD than men.

The higher risk of women being vulnerable to mental disorders is associated with hormonal factors which are further associated with the reproductive cycle of women . The reproductive cycle plays a crucial role in the increased rate of vulnerability of females to depression and other such mental disorders.

Other factors responsible for women's mental health are related to gender disadvantage such as excessive alcohol use by partner , physical and sexual violence by partner , low autonomy in decision making and have low support from their families. Further , stressful life is another cause.



## ***SEVERE MENTAL ILLNESS***

---

Severe mental illness/disorders are less prevalent than CMD. Some of the severe mental disorders are schizophrenia and bipolar disorders. The sufferer as well as their families are greatly impacted by the stigma associated with such illness. In most cases of severe mental illness the families are burdened with the responsibilities of taking care of the patients for a very long period of time which can be almost their entire life. Needless to say, the emotional and financial strain on the caregivers may be overwhelming.

The gender differences have been almost negligible in case of severe mental disorders , rate among both male and females merely 2 percent of population is affected by these types of mental disorders .

However ,gender differences have been observed in some of the areas associated, course of the disorders and other long-term outcomes. There is a difference in the features of bipolar disorder among men and women . As females face more frequent incidents of depression , seasonal patterns of mood changes or disturbances and they are more prone to “rapid cycling”.

Studies have reported that females have a later age of onset of schizophrenia as compared to their counterparts . Further ,various cross-culture studies in the field of schizophrenia have pointed out that ‘female gender’ is associated with a better course and outcome of schizophrenia in developing nations.

The social consequences of female gender such as abandonment by marital families ,vulnerability to social abuse and exposure to HIV and homelessness ,and other infections make the rehabilitation of female patients relatively difficult . Furthermore , prevalence of physical and sexual abuse of mental ill females is twice as observed in the general population of women . In India , no such policies for welfare of severely ill females and the association of social stigma also complicated the problem . However , the stigma related to female patients is much more prevalent as compared to males .



Female gender is associated with a favorable outcomes and social consequences like abandonment by marital families, homelessness, vulnerability to sexual abuse, and exposure to HIV; and other infections contribute to the difficulties of rehabilitation of women. The frequency of rates of sexual and physical abuse of females who are suffering from severe mental illnesses is twice as compared to the general population of females. In India currently there are no policies for the welfare of those females who are severely ill mentally. Further, the social stigma compounds the problem even more. There is even a gender bias in the stigma toward ill women is more than men.

### **Suicide**

Suicide is a major outcome of mental illness and is the most damaging one. Studies of suicide and deliberate self-harm have revealed that more females attempt to commit suicide as compared to male. However, more males complete the attempts to as compared to females and these trends are universally common. Biswas *et al.* found that girls from nuclear families and females married at a very young age to be at a higher risk for attempted suicide and self-harm. Analysis of data related to suicide has further revealed that age is an important factor as well. In the age group of 10 to 17, the rate of females outnumber the males in attempting suicide. However both male and females belonging to the age of 18 to 29 are at the highest risk.

In his seminal studies, Emile Durkheim had demonstrated over a century ago is that sociocultural factors are critical determinants of suicide behavior and perhaps these impact males and females differently. In an Indian study, the 1-year incidence of attempted suicide was 0.8 percent and 7 out of these women (37 percent) had baseline CMDs. The strongest predictors of the attempt of suicide include CMD, exposure to physical or violence and hunger. The main reason behind suicide attempt among females were response to failures in life, difficulties in personal relationships and harassment due to dowry. The precipitants for suicide, according to Indian government statistics, among women compared to men are as follows: Dowry disputes (2.9% versus 0.2%); love affairs (15.4% versus 10.9%); illegitimate pregnancies (10.3 versus 8.2); and quarrels with spouse or parents-in-law (10.3% versus 8.2%). In India, interpersonal relationships



are the top contribution for suicide attempt followed by other psychiatric disorders and physical illnesses. Further violence committed by the husbands are found to be associated as an independent risk factor for attempted suicide in women.

### **Violence and abuse**

An eye-opening United Nations report shows that around 2/3 of married women in India were victims of domestic violence and one incident of violence translated into women losing 7 working days in the country. Further an alarming 70% of married women between the ages 15 to 49 years are victims of physical and sexual abuse by the spouse. The common forms of violence against Indian women are such as selective abortion based on the fetus sex, domestic violence of various types for example mental and physical torture, harassment or deaths induced because of dowry, sexual trafficking etc. The reproductive roles expected of women, such as their ability of bearing children, infertility, and the failure to produce specifically a male child have all been linked female suicide and downgrading of the status of women in the society. Coercive sexual activities such as forceful sexual activity is a serious and prevalent problem among female Indian psychiatric patients as they are not able to even identify it as a problem and further can't report it as well. Sexual coercion was reported by 30 percent of the 146 females in an Indian study. The most prevalent reported instances were sexual intercourse involving threat or actual physical force (reported by 14% of women), and the most commonly identified perpetrator was the woman's husband or intimate partner (15%) which showed the alarming lack of consent as well, or a person in a position of authority in their community (10%).

In the end the consequences of gender-based violence are devastating that can result in life-long emotional distress, mental health issues such as posttraumatic stress disorder and poor reproductive health etc. Common mental health problems experienced by abused females include depression, anxiety, post traumatic stress, insomnia, and alcohol use disorders, and a range of somatic and psychological complaints. The cross-sectional data analysis from a recent study revealed that, in India depicted a relation between violence and a range of self-reported gynecological complaints, low BMI, depression, and suicide attempts. In brief, women are



subjected to an alarming amount of violence in childhood and adulthood, and suffer from the long term and intensive effects of this violence in most of the cases.

## **SUBSTANCE USE**

There are a lot of variations between nations on the account of substance abuse . The abuse of alcohol ,tranquillisers and analyses is increasing globally . However,women are more prone to attribute their drinking habit with a traumatic event or a stresses . The females who have been sexually or physically abused are at greater risk of being abused of alcohol or other drugs . This can lead to more depression and anxiety disorders among such women . Thus , the profile of women with substance use problems differs from that in male abusers. However, despite increasing rates, services to assist women are limited.

## **SCOPE OF THE STUDY**

The scope of this study is that it can help to get information about the current scenario of the health and fitness awareness among the women of Punjab. Because women are a very important part of our society .

## **SIGNIFICANCE**

This study can be used to spread awareness accordingly by evaluating the data i.e. we can emphasize more on those aspects which are least known to the women and enhance knowledge about those which are earlier known to them.For the implementation of the healthy diet and healthy lifestyle first of all one should be aware of health,nutrition and fitness . This can be achieved by educating and by spreading awareness among women.

## **OBJECTIVES**

1. The main objective of this study was to study health and fitness awareness among literate women.
2. This study highlights the concept of Importance of health,nutrition and fitness among women.



3. To study the awareness of health, nutrition and fitness among women.
4. To suggest measures for improvement of awareness about health and fitness.

## **HYPOTHESIS**

Researcher seeks to get a basic idea about the awareness of health, nutrition and fitness among literate women. Now-a-day women have different types of sources ranging from Books, Magazines, Social networks and blogs on Internet etc, for acquiring information about the basic Health, fitness and nutrition.

## **RESEARCH METHODOLOGY**

This study included both primary and secondary data. Primary data has been collected from the literate women of Punjab by using an online survey method with the help of Google Forms. The questionnaire was circulated among the random sample of Punjabi women. The total sample used for this study is 500. Secondary sources include newspapers, journals, government websites and National Digital libraries etc.

## **LIMITATIONS:**

This study was conducted on 500 women of different Professions like Students, Teachers, Athletes, Police officers, Housewives and working Women. Thus this study is limited to a few number of Women. Further, the data collected is based on the questions set up by the researcher.

## **DATA COLLECTION TOOLS:**

A Health and Fitness Awareness Questionnaire (HFAQ) developed by the researcher was used for data collection. The HFAQ consists of fifteen items with yes-no choice and respondents have to choose the correct alternative. The questionnaire covers basic issues such as;

- Awareness of nutrition (diet, macronutrients, etc)
- Awareness of fitness (strength and cardio workout)
- Awareness of health (physical as well as mental)



## LITERATURE REVIEW

Simpson(1989), in his study mentioned about the effects of participation in physical education upon health-related physical fitness components Three groups (weight training, aerobic dance and racquet ball) of physical education majors were selected as subjects (N=132) for the experimental study Health-related components measures used were cardio-respiratory endurance, body composition, flexibility and dynamic strength Both pre-test and post-test results were obtained Result indicated that there is a significant difference in scores with respect to health-related components of students involved in physical education programme Significant change in body composition, flexibility and dynamic strength were observed with the weight training and aerobic dance groups.

Math Lom.(1994) study shows that in rural areas where the government centres are particularly desolate, the community has chosen to expect its own health care particularly rural, the community has chosen to direct its own health care system of private practitioners of all kinds and qualifications. Even in rural areas where comprehensive health workers depend upon practitioners of various types .Upon analysis it was discovered that the reason for using the multiplicity of practitioners lead nothing to do with the level of satisfaction with the government services or with the convenience of the services. Rather, the people make a diagnosis and then go to the proper place for treatment. If, for example, they believe their illness was caused by the evil eye, they consult a magico-religious practitioner. These various types of practitioners burgeon in areas with best primary health care because they fulfil a need not met by the primary health care staff.

Acharya LOB. Et al .(2000) in their study with regard to the access –quality trade-offs, the evidence strongly suggest that basic perfection to health facility quality,(which are measured through availability of trained staff, equipment, supplied and facilities) is a more important precedence than increase the number of health facilities to improve the access. measured in terms of travel time based on a normal mode of transport.

Rahmqvisti Mikoel et al (2010) found in the study of two- dimensional outcome in the QSP model. Importance (to satisfaction) and quality (grade of satisfaction) that younger patients in emergency were least satisfied group. Patients with apparent better health status and those with more education or poorer health status. The two dimensions most strongly associated with global satisfaction were receiving the reception without getting information. Also collaboration in medical decision making is correlated positively.

### **ANALYSES OF DATA, RESULTS AND DISCUSSION**

This study has utilized online questionnaires as the tool of primary data collection and the data has been illustrated using pie charts and further explained by the research in this chapter.

Age group you belong to:

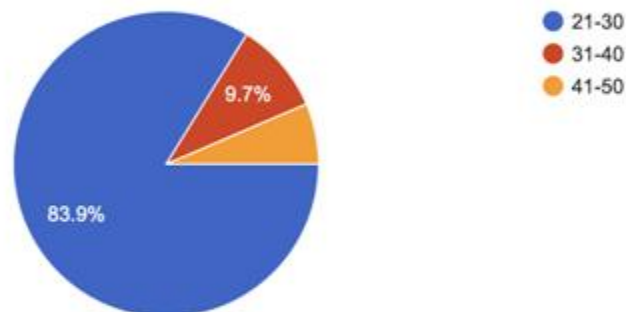


Chart 1

This chart depicts the percentage of respondents belonging to different age groups that participated in the study. Most of the respondents i.e. approx 84% are young belonging to the age group 21 to 30 years of age.



Do you play any sport for recreation?

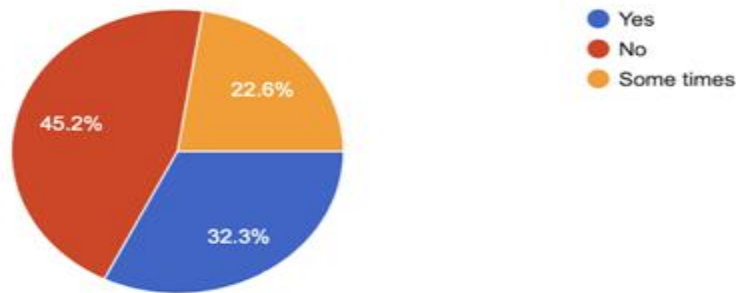


Chart 2

The above chart represents physical activities or sports as a tool of recreation and relaxation. It is evident from the above the pie chart that around half of the respondents do not play sports, hardly 32 percent do play sports whereas 22 percent marked some times. Sports are a great way to deal with stress and improve physical health as well, the above data reveals the lack of it among the respondents.

Do you have any health conditions ?

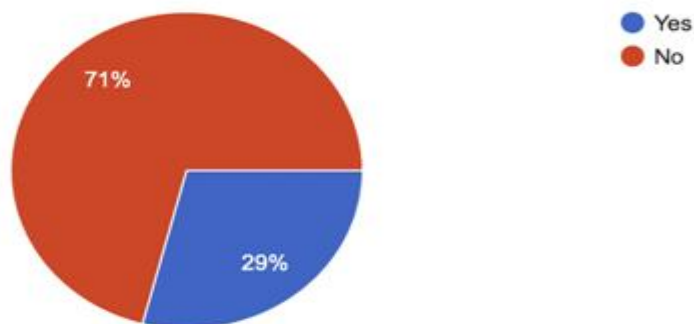


Chart 3

Major part of the sample has reported that they are not suffering from any health condition whereas measly one third of the sample is dealing with some health condition which is

significant as to evaluate the health factor of the respondents and can be a reason behind the awareness about the health and nutrition among the women studied under this research project.

Do you know how many calories you require per day ?

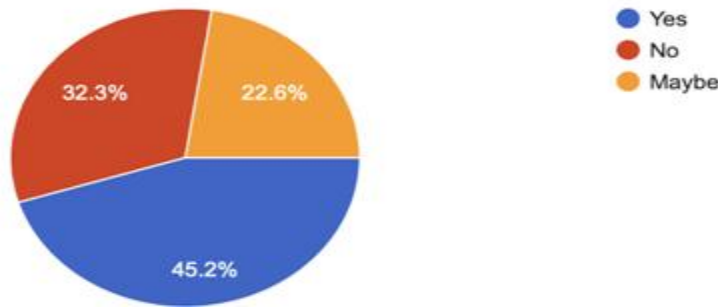


Chart 4

Calories required by each individual are different and having a basic guide about the requirements per day is quite important as it is an important tool to calculate malnourishment and for maintaining healthy weight and it changes as per the age, pregnancy and workload etc. In the different phases of life. Only around half of the respondents were certain about the calorie intake for a day required by them.

What is source of your protein intake ?

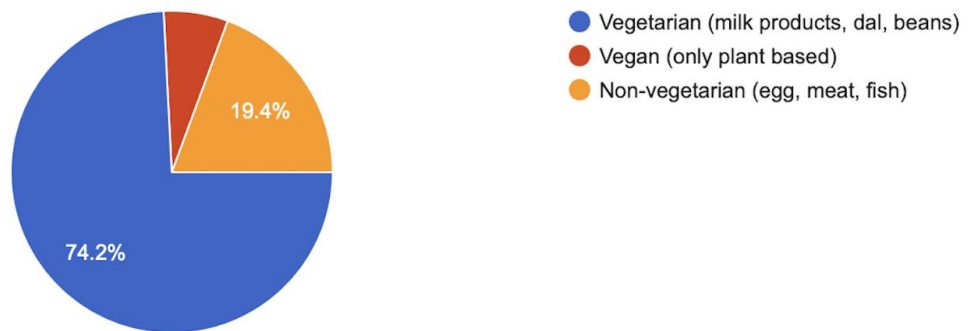


Chart 5

It is quite significant from the information provided in the above chart that the majority of the women that participated in the study were utilizing the vegetarian source of protein which requires thorough knowledge of the quantity to be consumed to fulfill the protein intake to optimum level everyday. In addition to the information provided by the previous chart it is evident that there is lack of knowledge about the calories required by the individual which further leads to not having enough information about the protein as well.

How much refined sugar you consume daily ?

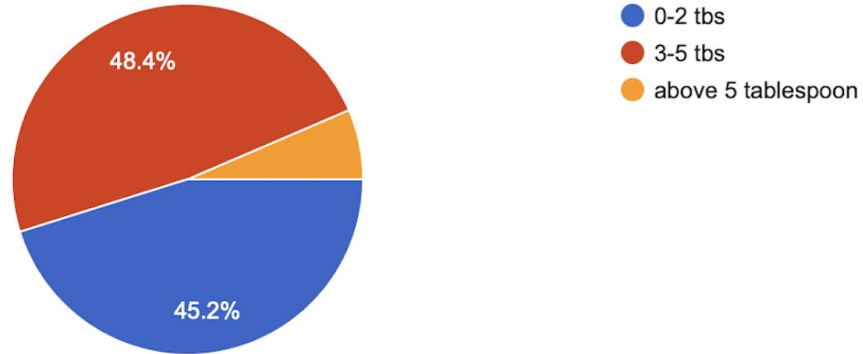


Chart 6

Consumption of refined sugar is an indicator of the calories and somehow directly related to the overall health of a person. Among the respondents of the study there's almost half of the sample that is consuming the level of sugar that is more than the recommended amount as per the WHO.

Which macro-nutrient you think is important for proper working of hormones ?

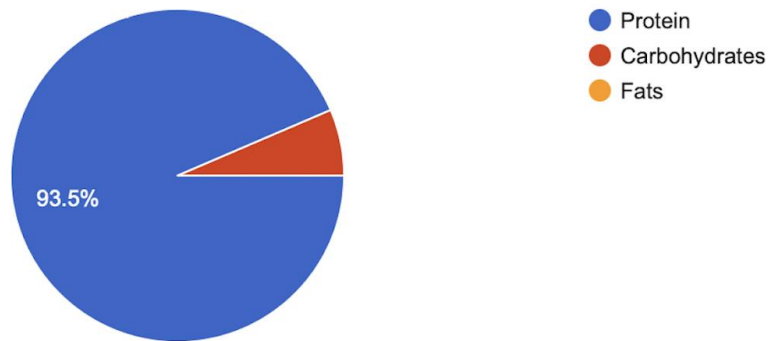


Chart 7

Unsaturated fats regulate metabolism, maintain the elasticity of cell membranes, improve blood flow, and promote cell growth and regeneration. Fats also deliver fat-soluble vitamins A, D, E and K into the body. Fats (Healthy Fats) play a very important role in hormone production.

While our body doesn't necessarily need saturated fats, they do provide your body with cholesterol, which plays an important role in hormone production. Your body does produce its own cholesterol, but small amounts introduced through your diet can help build cell membranes, producing hormones like estrogen.

In contrast to it, all of the respondents have neglected fats as the option and chosen the other two; a clear majority marked protein, which is not the right option and reflects the lack of awareness and somewhere fats are related to something which causes weight gain rather than an important part of a balanced diet. It is quite alarming to get such a response as hormones play a vital role in the functioning of the body, especially in females.

Do you take balanced diet ?

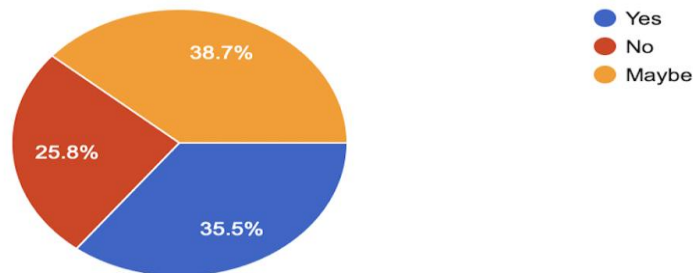


Chart 8

Balanced diet is the major component of a person's health and the food you take plays an important role in your life. Balanced diet is the one that contains all the macronutrients such as protein, vitamins, carbohydrates, fats and other micronutrients as well. The above data reveals that merely 35 percent of respondents admitted that they take a balanced diet which is quite less, whereas around 38 percent are not sure if they take a balanced diet or not. There is a fraction of 28 percent which indicates that they don't consume a balanced diet and it also reflects indirectly that they are familiar with the term balanced diet but they lack to incorporate it in their life. Being aware is the key to ensure holistic growth.

What do you do for stress release ?



Chart 9

Stress management is a wide spectrum of techniques and psychotherapies aimed at controlling a person's level of stress usually for the purpose of and for the motive of improving everyday functioning. Stress leads to various physical and mental symptoms which can be different according to each individual's situational factors. These can include a decline in physical health as well as depression. The process of stress management is named as one of the keys to a happy and successful life in modern society. Life often delivers multiple demands that can be difficult to handle, but stress management provides a number of ways to manage anxiety and maintain overall well-being.

The researcher asked the participants of the study to mention the way that they use for stress release; the majority of The respondents marked that they either talk to a friend or a family member about their problems or asking solutions to get rid of stress. The second most common way is to listen to music or reading as a reliever of stress among the respondents whereas yoga or meditation is opted by quite less number of women.

Overall how would you rate your mental health ?

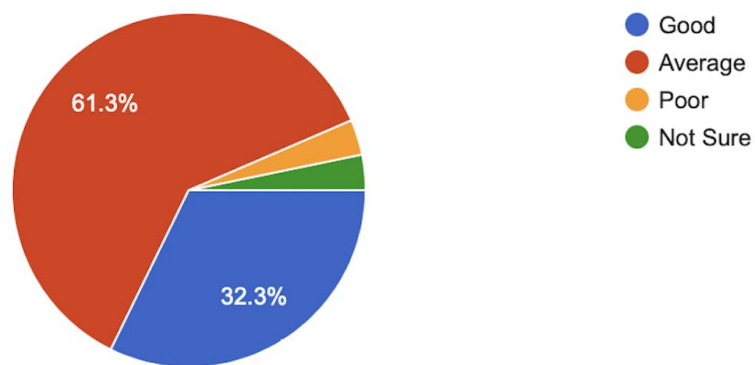


Chart 10

Social and economic factors can put women at greater risk of poor mental health than men. However, women generally find it easier to talk about their feelings and have stronger social networks, both of which can help protect their mental health. When women find it hard to talk about difficult feelings, they tend to internalise them. This can lead to depression, eating disorders and self-harm.

It is quite evident from the above figure that merely 32.3 percent of respondents marked their mental health as good whereas, the majority of 61.3 percent rated their mental health as average. The majority of respondents have given an average as answer to the question and that is not a good indicator of the mental health among women.

Do you think nutrition and fitness affect your mental health ?

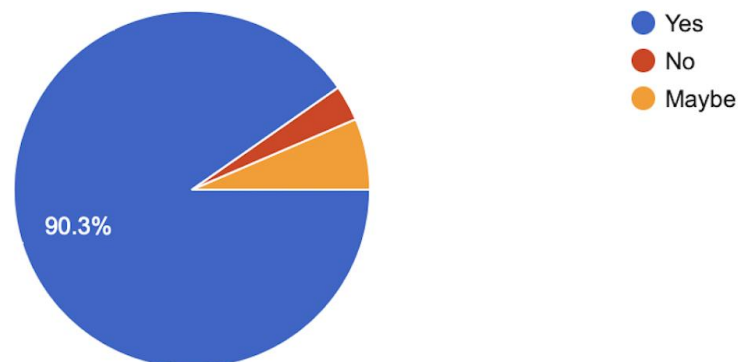


Chart 11

The diet that we take can affect our brain and eventually mental health. There is a complex relationship between nutrition and fitness with the mental health of a person. There are two groups of foods that have a negative effect on the brain: a) foods that trick the brain into releasing chemicals we may be lacking, temporarily altering our mood (for example, caffeine and chocolate) and b) foods that prevent the conversion of other foods into nutrients the brain needs (for example, saturated fat such as butter, lard and palm oil).

The above chart illustrates that a vast majority of respondents agreed that there is a relationship among food and nutrition and it affects mental health. While only a total of 10 percent has been in may be or no as an answer to the effect of nutrition and fitness on mental health.

How many days do you workout per week?

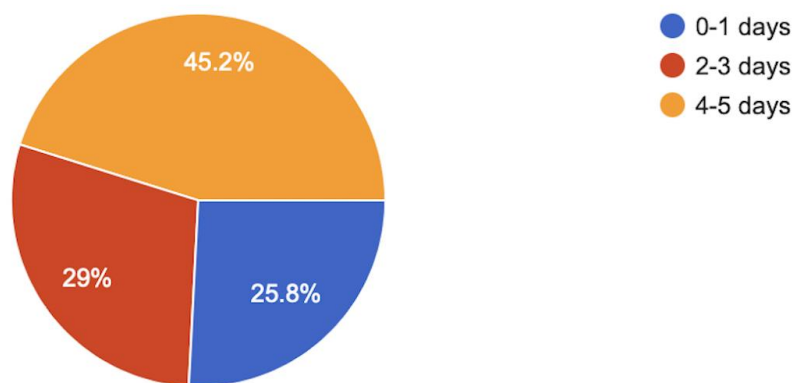


Chart 12

The days of workout per week depend upon the individual need of a person. There should not be one size fit all approach for deciding the days for workout. The needs of different individuals are different according to the various requirements and the conditions including economic, social and physical status of the person. There is no simple formula that's right for everyone. If you're looking to amp up your fitness level, your magic number of days depends on how active you already are.

While looking at the data of the above chart we can analyse that around 45 percent of the respondents are those that work for 4 to 5 days per week which can be considered as an ideal period of the workout that is required for being fit. The fraction of participants working for 0-1 days and 2-3 days is 25 percent and 29 percent respectively.



How many minutes do you do walking/ running /cycling / swimming per day ?

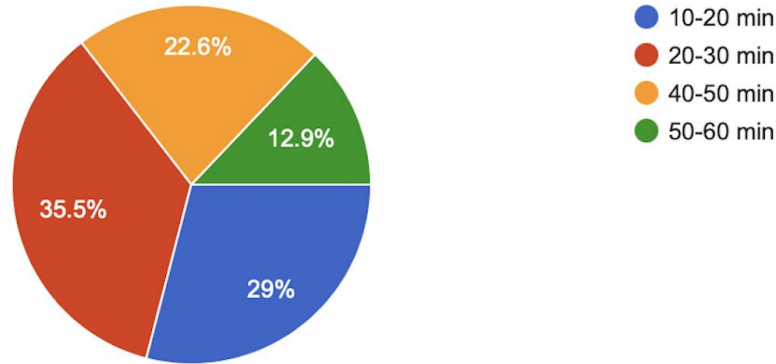


Chart 13

Australia's Physical Activity and Sedentary Behaviour Guidelines recommend that at least 30 minutes of workout per day for an individual that can be a brisk walking, running, cycling or swimming or any other physical activity that can help in achieving fitness.

The above chart illustrates that merely 35 percent of respondents fall in the optimum required time of around 30 minutes which is not a good indicator while looking at the overall response of the participants. Further, the respondents reached the bare minimum of 10 to 20 minutes of workout during the day. While there is a noticeable fraction of respondents that workout or perform physical activity more than the recommended limit as mentioned above; around 22 percent utilise 40 to 50 minutes of their day to do physical activity and only 13 percent work for 50 to 60 minutes which is around 1 hour.

How many hours do you sleep per day ?

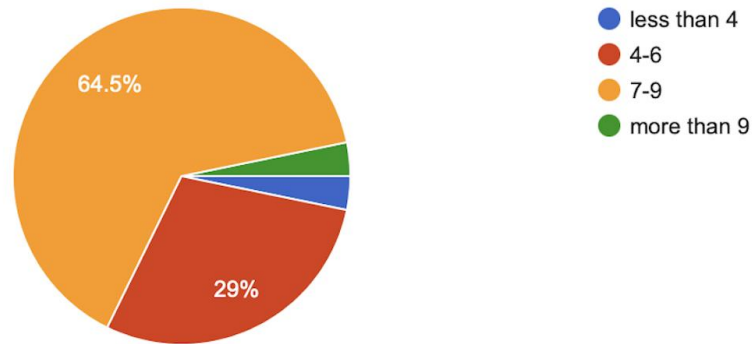


Chart 14

Regular sleep is an important indicator of the health of an individual. There is an ideal sleep time of Eight hours that is recommended by the domain experts for holistic fitness or having a good physical and mental health.

The respondents were asked about their sleep over the time interval of a day in the measurement of hours that they sleep during a day. The majority of the respondents marked that they sleep around the range of 7 to 9 hours a day. This is the reflection of the sleep time in line with the ideal time period for an individual. In contrast merely 29 percent of the respondents answered with 4 to 6 hours of sleep per day. The number of participants belonging to less than 4 hours and more than 9 hours is quite insignificant with respect to the total sample of the study.

How often do you feel positive about your life ?

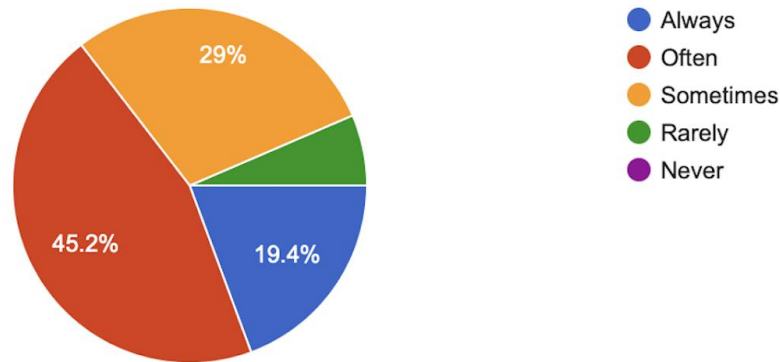


Chart 15

This question asked the respondents " how often do you feel positive about your life ?", which is to evaluate the overall health and fitness of an individual and a cross question to check the validity of the previous questions of the questionnaire. The number of respondents which has marked a clear cut yes and always is only around 19 percent. whereas , around 45 percent of the respondents marked that they often feel positive about their life which is relatively low. Only 29 percent of respondents are of the opinion that they are sometimes positive about their life. However, it is fortunate enough that nobody noticed that they never feel positive about their life, which can lead to an underlying occurrence of a severe physical or mental crisis that they have been dealing with.



## CONCLUSION AND SUGGESTIONS

It is important for women to have adequate nutrition not only as it helps them to be productive individuals of the society but also proves to be directly related to their own health and development of the coming generation as well.

Awareness is a magnificent tool for improving and gauging the development in a multidimensional aspect of society and ultimately the nation. If we have the women who are aware about the various recommendations regarding health both physical and mental, and nutrition etc. a healthy individual helps in building a healthy nation. The following text includes the conclusion and suggestions regarding this.

- **Lack of Time**--Many of the women play multiple roles including household chores, paid employment/ work, care-taking and child-rearing and hardly find time for themselves. Their burden should be reduced by the other members associated with them including family, colleagues and friends etc by providing co-operation as much as possible.
- **Parenting demands** – many women perform various care-giving responsibilities such as children and older family members or relatives, and further take responsibility for preparing meals and cleaning activities of the household. There should be some sort of help to share child rearing and household chores with spouse or other family members. Or paid domestic help for such work .
- **Lack of energy** – fatigue is a by-product of a prevalent busy lifestyle. Women are often tired and lacking in performing physical activities such as walking, running, cycling and swimming etc which was also evident from the data of this study. Regular exercise can provide women with the energy to better deal with the demands of daily life and aid the achievement of fitness.
- **Health problems** – older women are more prone to have a chronic health condition that hinders their participation in some forms of exercise. Fortunately, there was a quite less percentage of respondents suffering from any health issues in this study.



- **Lack of fiscal resources** – women belonging to low incomes strata are less likely to exercise regularly and access to required nutrition. This can be tackled in going for local and easily available veggies and fruits and grains etc for achieving fitness both physically as well as mentally.

### **The 5 Essential Nutrition Interventions include:**

#### **1. Improving the quantity and nutrient level of food consumed in the household**

This primarily includes improving access to generalised household food ration through public distribution system. Also providing access to supplementary foods under the integrated child development services scheme. To impart knowledge to improve the local diet, production and household behaviours through nutrition and health education.

#### **2. Preventing micronutrient deficiencies and anaemia**

This through providing the Iron Folic Acid Supplementation deworming, Pre and peri-conceptual folic acid supplementation, Universal access to iodized salt, Malaria prevention and treatment in malaria-endemic areas, Access to knowledge and support to stop use of tobacco products during pregnancy, Maternal calcium supplementation, Maternal vitamin A supplementation.

#### **3. Increasing women's access to basic nutrition and health services**

By providing early registration of pregnancy and quality of antenatal checkup, with emphasis on pregnancy weight gain monitoring, screening and special care of at-risk mothers.

#### **4. Improving access to water and sanitation education and facilities. By providing sanitation and hygiene education, including menstrual hygiene.**

#### **5. Empowering women to prevent pregnancies too early, too often and too close together**



### **Suggestions for physical and Mental fitness include:**

- Identification of barriers for example lack of money or motivation and finding alternative solutions to deal with it.
- Consider the subjective beliefs that may be holding you back, such as guilt about taking time out for yourself . Challenge those boundaries and make your family aware that your needs are as important as theirs.
- Find a support group that can include your spouse, family members, friends or paid childcare.
- Find activities you like to do as having a hobby can be really helpful in improving your mental health. You're more likely to perform an activity that you enjoy than if you do it because it's 'good for you'.
- Look through your diary for the week and make 'appointments' with yourself and people who you like to be with.
- Set achievable goals for yourself. Don't fall for the 'all or nothing' mentality. If you can only find the time for one or two exercise sessions per week presently, congratulate yourself on this achievement. Every little bit helps and some exercise is significantly better than no exercise at all.

### **References**

1. Drannan, J. (2016). Arabian Journal of Business and The Relationship Between Physical Exercise and Job Performance: The Mediating Effects of Subjective Health and Good Mood, 6(6), Bus, A. J., Review, M.,
2. Shah, H., Dhimi, H., & Shah, T. (2016). Assessment of physical activity level in female students of residential college using global physical activity questionnaire: A cross-sectional analysis. International Journal of Current Research and Reviews, 8(13), 24–27.
3. Anderson E., Durstine J.L. Physical activity, exercise, and chronic diseases: A brief review. *Sports Med. Health Sci.* 2019;1:3–10. doi: 10.1016/j.smhs.2019.08.006.



4. Goud, M., Pamidi, N., Devi, O. S., Nayal, B., Kamath, U., & Raghuv eer. (2014). A questionnaire survey of awareness of physical activity among the faculties of a medical college. *Journal of Education and Health Promotion*, 3(April), 47.
5. Seefeldt V., Malina R.M., Clark M.A. Factors affecting levels of physical activity in adults. *Sports Med.* 2002
6. Schmidt, S. C. E., Tittlbach, S., Bös, K., & Woll, A. (2017). Different Types of Physical Activity and Fitness and Health in Adults : An 18-Year Longitudinal Study, 2017.
7. Sharifzadeh, M. (2013). Does Fitness and Exercises Increase Productivity ? Assessing Health, Fitness and Productivity Relationship Mansour Sharifzadeh California State Polytechnic University Pomona, 13(1), 32–52.