

CHAPTER I

INTRODUCTION

1.1 INTRODUCTION

Purusartha-sunyanam gunanam pratiprasavah kaivalyam svarupa-pratistha va citi-sakter iti. (IV-34) (Patanjali)

Patanjali's Yoga Sutra which talks about ultimate goal of human life is Liberation. That ultimate state of liberation is beyond the realm of intellect and therefore cannot be described in words.

Liberation cannot be attained until purity arises. To attain purity one has to realize the self. Through pure knowledge is liberation, through auspicious knowledge is worldly happiness, through wrong knowledge is misery. If one who wants to go to Liberation, then one will have to adjust everywhere. Do not ever get involved in clashing with anyone - this is the biggest key to go to liberation. (Niruben Amin 2008).

1.2 HAPPINESS

Human beings have born to attain happiness. Birth is not being for tortured by diseases. Happiness is the birth right of each and every individual. The creation is meant to endow happiness. No one outside can prevent from being happy. Not even God can prevent from enjoying bliss. When God has created this universe and men in order to live happiness and peace, anyone is certainly not going to prevent from being happy. Loosing own happiness is not through the faults of others. The responsibility is on who is losing the happiness through ignorance and in action of own. Disease represents only the reverse state of happiness. (Yogacharya Sundaram, 2004).

Happiness is a mental or emotional state of well-being characterized by positive or pleasant emotions ranging from contentment to intense joy. Happiness and wellbeing is a state of mind developed by three basic interlinked elements such as physical or structural health, psychological or mental health and social health. (Ruchi Sundriyal and Ravindra Kumar, 2014)

Man has disturbed the balance between the internal and external activities, a balance which is necessary for a successful and happy life.

1.3 TOTAL WELBEING

“As there is a technology to create external wellbeing, there is a whole dimension of science and technology to create inner wellbeing” (Sadhguru Jaggi Vasudev, 2013)

Each individual needs a dynamic balance of multidimensional health and methods to move closer to wellness amidst the myriad of life situations, uncertainty, struggles, goals and hardships. The wellness approach would be to take preventative measures to optimize the performance of immune systems, minimize exposure to toxins, identify allergies, eat mostly natural and organic foods, drink plenty of clean water, and maintain a healthy percentage of body fat and lean muscle mass, while developing and maintaining strength and flexibility. To improve the multidimensional health and happiness, can come from learning and maintaining the basic fundamentals of nutrition, positive and healthy thinking good habits and a healthy personal philosophy, aware of life's purpose, developing the innate gifts and using talents in a positive way and getting in touch with the spirituality. One cannot control others, can only make investments in the best relationships and be strong to avoid the needy destructive ones that detract from attain wellness and many other aspects can make up a great lifestyle without detracting from personal or family wellness and in fact tends to lead to a generally happy and healthy life. (Kathy Kiefer, 2014)

1.4 DEMOGRAPHY AND HEALTH

Demography is the study of human populations. This includes study of the size distribution and composition of populations as well as related dynamic process such as fertility, mortality and migration. Health is the condition of health experienced by individuals and populations. Health demography concerns itself with the manner in which such factors as age, marital status and income influence both the health status and health behavior of populations and in turn how health related phenomena affect demographic attributes. In today's health care environment need to understand the motivating behind consumer behavior and these behaviors linked to demographic characteristics. (Louis G. Pol and Richard K. Thomas, 2001)

Demographic and socioeconomic factors are major determinants of health. As fertility declines, income rises, populations age and become more urbanized, and epidemiological profiles also shift, with an increasing share of the burden of disease accounted for by non-communicable diseases, accidents and other external causes.

Increasing education, especially of women, also has a major impact on the use of health care and on health status. (World Health Organization, 2009)

Health is the greatest wealth and asset for the people. Without good health and strength, no one can achieve success, enjoyment in the life and god realization. Good health comes from following definite rules. Those who ignore the rules of health will suffer much and meet death.

The precious thing that makes life worth living is health. Charaka Samhita says, “Dharmartha-kama-mokshanam arogyam lamuttamam, rogastasya-apahartarah sreyaso jivitasasyacha” health is the best source of virtue, wealth, desire and emancipation, it is the blessedness of life. Diseases are the destroyers of health. (Swami Sivananda)

1.4.1 DEMOGRAPHICS AND HEALTH STATUS OF THE WORLD

Total population of the world is approximately 7,453,710,000 to July 2016. Its overall population density is 50 people per km², excluding Antarctica. Nearly two-thirds of the population lives in Asia and is predominantly urban and suburban, with more than two point five billion in the countries of China and India combined. (U.S Census Bureau, 2016)

Globally, life expectancy has been improving at a rate of more than three years per decade since 1950, with the exception of the 1990s. Global life expectancy in 2015 was 71.4 years. Twenty-nine countries have an average life expectancy of 80 years or higher. Life expectancy exceeds 82 years in 12 countries.

Globally, Healthy Life Expectancy in 2015 is estimated at 63.1 years for both sexes combined. In general, it varies between countries in line with life expectancy but is on average 11.7 percent shorter than life expectancy. The contributions of each of the major causes of this loss of healthy years are the main contributors are musculo skeletal disorders with back and neck pain, mental and substance-use disorders, particularly depression and anxiety disorders, neurological disorders, vision and hearing loss, and cardiovascular diseases and diabetes. The prevalence of most of these conditions rises with age. As life expectancy increases, the proportion of the life span spent with these conditions increase. Healthy life expectancy thus increases more slowly than life expectancy.

The sex of an individual has a range of biological, behavioural, social and economic consequences for health. Major differences between males and females may

exist in mortality and causes of death, morbidity, coverage of interventions, risk factors and determinants. (World Health Organization, 2016)

1.4.2 DEMOGRAPHICS AND HEALTH STATUS OF INDIA

India has one percent of the world's population and its 70 percent of the population resides in rural areas and males significantly outnumber females, an imbalance that has increased over time. There are systematic problems in women health care as the typical female advantage in life expectancy is not seen in India

India is a traditional country, where women are respected as *Matrishakti*. Health care access is important for women as women body changes throughout the life time, from fetal development to post menopause. Women use medical services more often than men, especially during the reproductive years. Many women also face huge social, economic and cultured barriers to having lifelong good health. (Vandana Kushwah, 2013).

According to the World Health organization in 2015 life expectancy in India is male 66.9, female 69.9 and total life expectancy is 68.3 which give India a World Life Expectancy ranking of 123.

India is passing through demographic and environmental transition which is adding to burden of diseases. The first half of the 20th century witnessed a large number of communicable disease epidemics. There have been major improvements in public health since 1950s. However, there have also been health consequences of urbanization and industrialization. There is persisting inequality in health status due to varying economic, social and political causes. Ever increasing population with increasing geriatric population and changing lifestyle with more urbanization is putting pressure on environmental as well as on nutritional requirement resulting in nutritional deficiency, poor sanitation increasing communicable and non-communicable diseases etc. The growth of public health in India has been very slow due to low public expenditure on health, very few public health institutes in India and inadequate national standards for public health education. (Chauhan L S. 2011)

1.4.3 DEMOGRAPHICS AND HEALTH STATUS OF TAMIL NADU

The population of the state in the Census 2011 is enumerated as 72,147,030. The decadal growth rate of the state during 2001-2011 Census is 35.3 percent and the decadal growth rate of above 20 percent was recorded in the districts of Chennai and Coimbatore. The sex ratio of the state is 987 females per 1000 males, is the lowest (954) in Salem and highest (1041) in the Nilgiris.

In Tamil Nadu, not much differences of chronic diseases between males and females, except in case of some diseases. For instance, more females reported symptoms related to respiratory system and musculo skeletal system. In contrast, males reported more of symptoms related to disease of cardiovascular system. (International Institute for Population Sciences, 2014)

Indian cities are the hub of economic activities and centers of social development, but most cities have to cope with poor living conditions, increasing poverty, and a myriad of public health problems, Chennai ranks first or second on most health indicators, far surpassing any other city, but it has the highest rates of domestic violence, overweight women, and alcohol consumption. (Kamla Gupta, Fred Arnold, and H. Lhungdim, 2009).

1.4.4 DEMOGRAPHICS AND HEALTH STATUS OF CHENNAI

Chennai district has highest population in the State. The district population density is 26553 persons/sq. km. Chennai district is a Metropolitan City. The district sex ratio is 989, lower than the State sex ratio of 996. It is the second highest literacy rate of 90.2 percent among the districts. The decadal population growth during 2001-2011 is seven percent, second least decadal change among the districts. It has recorded the lowest percentage of agriculture. (Census of India, 2011)

The Health Department in Greater Chennai Corporation is the oldest establishment and most vital component. Primary health care, control of communicable diseases, regulation of Directors and Officers trades, general sanitation, vital statistics, maintenance of burial grounds and slaughter houses are the principal duties of health department. With the emerging and re-emerging communicable diseases, population explosion, advancement in medical technology and national and International Health Policies the scope and responsibilities of the Health Department has increased several folds. (Chennai Corporation.gov.in/departments/health/public Health Dept.)

1.5 WOMEN HEALTH

Women health refers to the health of women, which differs from that of men in many unique ways. Women health is an example of population health, where health is defined by the World Health Organization as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Often treated as simply women reproductive health, many groups argue for a broader definition pertaining to the overall health of women, better expressed as "The health of women". These differences are further exacerbated in developing countries where women, whose health includes both the risks and experiences, are further disadvantaged.

Gender remains an important social determinant of health, since women's health is influenced not just by the biology but also by conditions such as poverty, employment, and family responsibilities. Women have long been disadvantaged in many respects such as social and economic power which restricts access to the necessities of life including health care, and the greater the level of disadvantage, such as in developing countries, the greater adverse impact on health. (World Health Organization, 2016)

With women's lives the bodies too are changing. puberty, pregnancy, obesity, thyroid, polycystic ovarian syndrome, menopause, stress as women go through different stages of life, women's bodies too transform accordingly. As a woman, looking after health is the most important step to take towards creating a healthy, happy family and a thriving community. But in today's busy world, with so many demands on time, it's not always easy to find information to trust. (Payal Gidwani Tiwari, 2015)

1.5.1 IMPORTANCE OF WOMEN IN THE SOCIETY

Jagajñāntyasandeham ḡrhino lokarakṣakāḥ |

Annajñānadhanāvāsapradānairiti cakṣuṣā ||

The whole world knows without doubt, that it is the housewife who is the protector of the world, for gifts food, knowledge and wealth and provides a place to live.

Women are also busy taking care of children, grandchildren, relatives, beggars, dependents, cattle and others then find little time to take care of personnel.

Being the situation, how can these women who always active practice yoga? However, without women, life in this world is like flowers in the sky. Therefore some important anga-s of yoga which makes the body healthy must be practiced with some discipline by women, for the protection of the family. (Desikachar, 1998)

Woman is the mighty work of God, the wonder of nature, the marvel of marvels, the abridgement and epitome of the world, the queen of the home, the real governess, the sweet companion and helpmate of man. Woman is the energy aspect of the Lord, the child of primeval power, holds the key of this world, and controls the destiny of children, mother of Sankaras and Buddhas.

Woman is a mysterious mixture of softness, gentleness and grace, a compound of service, patience and love, maya`s tempting charm and magic, comforts and cheers up the husband, children and guests. Even Brahma the creator failed to describe fully. Women is a kind of mysterious something that gives charm to this world. Without women the home is void, man is helpless, this world loses all charm and there is no creation. (Swami Sivananda)

1.5.2 WOMEN HEALTH STATUS IN THE WORLD

Health of girls and women has much improved over the past 60 years; the gains have been unevenly spread. In many parts of the world, women lives, from childhood to old age, are diminished by preventable illness and premature death. More than two point five million elderly women will go blind for reasons that are similarly avoidable. Women health is a necessary and effective approach to strengthening health systems overall action that will benefit everyone. Improving women health matters to women, to families, and to communities and societies at large. Improve women health and improve the world. (World Health Organization, 2016).

1.5.3 WOMEN HEALTH STATUS IN INDIA

The life expectancy in India has taken a quantum jump from 30 years in 1940s to 61 years in 1990s. According to the world health organization`s health statistics 2011, in India an average female life expectancy in 2011 is 68 years and is projected an increase to 73 years by 2021

Women health in India can be examined in terms of multiple indicators, which vary by geography, socioeconomic standing and culture. To adequately improve the

health of women in India multiple dimensions of wellbeing must be analyzed in relation to global health averages and also in comparison to men in India. Health is an important factor that contributes to human well-being and economic growth.

Currently, women in India face a multitude of health problems, which ultimately affect the aggregate economy's output. Addressing the gender, class or ethnic disparities that exist in health care and improving the health outcomes can contribute to economic gain through the creation of quality human capital and increased levels of savings and investment. (Ariana, Proochista and Arif Naveed, 2009)

1.6 HEALTH ISSUES

Being overweight or obese increases the chances of dying from hypertension, type two diabetes, coronary heart disease, stroke, gall bladder disease, osteoarthritis, sleep apnea, respiratory problems, dyslipidemia and endometrial, breast, prostate, colon cancers, tobacco dependence disease and substance abuse.

Dementia is not part of aging. Dementia can be caused by disease, reactions to medications, vision and hearing problems, infections, nutritional imbalances, diabetes, and renal failure. The most common late -in-life mental health condition is depression. If left untreated, depression in the elderly can lead to suicide. Among seniors, falls are the leading cause of injuries, hospital admissions for trauma, and deaths due to injury. One in every three seniors age 65 and older will fall each year. Pollution affects all. Compared to the general population, a higher proportion of elderly are living just over the poverty threshold. Influenza and pneumonia are among the top ten causes of death for older adults, especially among women and the very old. Seniors frequently don't monitor health as seriously. (University of Rochester Medical Center Rochester, 2016)

1.6.1 WOMEN HEALTH ISSUES

Women have unique health issues. Unique issues include pregnancy, menopause, and conditions of the female organs. Women can have a healthy pregnancy by getting early and regular prenatal care, breast cancer, cervical cancer, and bone density screenings. And some of the health issues

that affect both men and women can affect women differently. Women are more likely to die following a heart attack than men. Women are more likely to show signs of depression and anxiety than men. The effects of sexually transmitted diseases can be more serious in women. Osteoarthritis affects more women than men. Women are more likely to have urinary tract problems. (National Institute of Child Health and Human Development, 2015).

The female reproductive system is more complex than its male counterpart and therefore it is not surprising that it is subject to more frequent disturbances. Unlike the male reproductive system, where the major reproductive organs and glands are visible externally, the major organs and glands of the female system lie inside the pelvic cavity and are not visible or outer entrance to the vagina.

Disturbances of the menstrual and reproductive functions are extremely common and are source of continual suffering for many women throughout the life. In many countries the topic of reproductive function is traditionally veiled in secrecy and as a result, many women do not fully understand the natural process and cycles occurring in the bodies or are misled by superstitions and false or inaccurate information. Many are too shy or ashamed to seek guidance and assistance when troublesome irregularities of function occur, while many others accept the problems philosophically or are not even aware that a disturbance is present and that a healthier state is possible. (Swami Karmananda, 2008).

It is time to celebrate women and achievements of women. But it is also time to take stock of how women rights are fulfilled in the world, especially the right to health. Women still face many health problems. Major main issues regarding women health are Cancer, Reproductive health, Maternal health, HIV, Sexually transmitted infections, Violence against women, Mental health, Non communicable, Being young Getting older diseases uterus and breast cancer . Detecting both these cancers early is the key to keeping women alive and healthy. (Flavia Bustreo, 2016)

1.7 MENOPAUSE

At the time of the menopause the leisure and pleasure years should stretch joyously. Now that women are living longer than ever before, there are golden opportunities to indulge in all the leisure pursuits that may have taken fancy and achieve some of the goals that were just dreams when family and work commitments

took a priority. When the family is old enough to be independent and the financial commitments have dwindled, in theory there should be no stopping so long as are in good health. However, for at least three quarters of all women, the menopause brings with it rapid changes and unwanted symptoms which, in many cases, are life disrupting and produce utter misery, being reduced to a hot, red, anxious, introverted wreck, struggling to keep a grip on life.. (Maryon Stewart, 1995)

Menopause can be a psychological, emotional and intellectual turning point as well as a physical one. As the menopause approaches, the ovaries begin to fail and there is a sudden dip in female sex hormones, estrogen and progesterone, which causes the cessation of menstruation. Symptoms of the menopause may be both long and short term. Short term symptoms include hot flushes, night sweats and loss of libido, and some women can experience these for ten years or more long term symptoms include the thinning and drying out of the vaginal and genital skin and urinary troubles these may all become permanent. Some of the other consequences of the menopause are dangerous and are like bombs waiting to explode. These are osteoporosis or brittle bones and one four women who admitted to hospital with a fractured thigh bone never leaves, so it is important that are all protected from the disease. Estrogen depresses blood cholesterol, improve glucose tolerance and protect from heart and vascular disease, including heart attacks and strokes. Estrogen is truly life-saving. Menopause affects every organs of the women`s body, and any treatment must be viewed in the context of what is good for the whole; that involves diet, exercises, relaxation, yoga, vitamins, minerals and whatever change in the lifestyle would help. (Miriam Stoppard, 2001).

1.7.1 MENSTRUATION

Menopause is the offset of menstruation. Each woman is endowed with a fixed stock of millions of eggs at the time of birth. Each of these eggs is individually placed in sac like structures called follicles these eggs lay in a very quit and dormant state till the girl reaches puberty. Following puberty, several of these eggs containing follicle start growing in response to the hormones secreted by the brain during each menstrual cycle. Of the several follicles that grow during each menstrual cycle, all except one undergo natural death. Only one of the follicles, which follicle dominates over the others, continues to grow and finally breaks open to release the egg. This release of the egg from the follicle is termed as ovulation, if the egg finds its mate may get

fertilized and goes and adheres to a fine bed like structure in the uterus a natural death. The growth of the follicles, ovulation and the formation of the uterine bed is under the strict control of the hormones secreted the brain and the ovary. (Rajivi H Mehta, (2015)

1.7.2 MENOPAUSAL WOMEN STATUS WORLD WIDE

Worldwide, the average age of menopause for women is 51 years. Some women can experience it sooner and others later; some women may have last period in late 30s while others might have to wait till 60s. Typically in Indian women, menopause takes place a little earlier, the average age ranging from 40 to 49 years. Peri and postmenopausal women significantly presented higher rates of menopausal symptoms when compared to premenopausal women. (Chedraui, et al. 2007)

1.7.3 MENOPAUSAL WOMEN IN INDIA

While menopausal women in India experience the similar emotional and physiological problems, it is almost officially unheard of in public circles. India has traditionally ignored women health issues including menopause, and only the latest societal trends are attempting to break the outdated attitudes towards women.

Women in India are no different in terms of attitudes towards menopause; some women dread and fear menopause while other women embrace or at least accept menopause. Women issues including health and menopause are almost never discussed. Although women always remain subservient to men, older women in India do enjoy a measure of respect as the senior member of the family. Unfortunately this enhanced status does not make it easier for women to talk about or seek help for menopause.

The average age of menopause in India is 47.5 years; it is lower than the average age of 51 for North American and European women. However, the premature menopause cases are on the rise in India due to a combination of environmental and genetic reasons. Indian women living in rural and urban areas both cite having urogenital symptoms and general body aches and pains. Interestingly, women in urban areas complain more about having hot flashes, mood swings, psychological problems, and intercourse challenges. Urban-based Indian women are subjected to more demanding and fast-paced lifestyles which may explain the differences in symptom reporting.

Osteoporosis is a serious risk for Indian women. Osteopenia, or low bone mineral density usually means a greater chance of developing osteoporosis. Approximately 35-40 percent of Indian women aged 40-65 suffer from osteopenia. Indian women tend to have low bone density due to a lack of both sufficient calcium intake and adequate exercise. Cardiovascular disease is quickly becoming one of the leading causes of death in women and Indian women are no exception. Lower High Density Lipoprotein, Higher Low Density Lipoprotein cholesterol and triglyceride levels, increased high blood pressure occurrences, and obesity rates among menopausal Indian women translate into increased risks for heart attacks and strokes. Diabetes rates are also on the rise for women in India. Cancer rates for Indian women between the ages of 35 – 64 are steadily growing. Breast, cervical, ovarian, and endometrial cancers account for between 29.4 and 72.5 percent of all cancers in women. Cancer rates vary between India's geographic regions; health care access, education, and lifestyle are different throughout the country.

Surgical menopause is performed widely in India and both doctors and patients view a hysterectomy as a preferred option in menopause treatment. There are cultural barriers along with fears, concerns and improper compliance of patients on advice of life style changes and medication is another problem. The high cost and non-availability of full range of therapy through the country make tailoring of treatment for individual women difficult at times. Moreover, there is lack of availability of diagnostic facilities for screening and monitoring of menopausal women including those on therapy.

The Indian Menopausal Society is working to help improve awareness about women health issues and educating doctors and patients about menopause. This is an enormous project in India where the huge population and wide range of literacy and education levels make it difficult to effect positive change for women in society. It seeks to improve living, dietary, and physical conditions of women. Changes in India are slowly happening and though it may take several decades, talking about and seeking help for menopause will help to improve the lives of women in India. (Michael Pekker, 2013).

1.7.4 TYPES OF MENOPAUSE

Types of menopause can be categorized by way of happening, age of onset, etc.

1.7.4.1 NATURAL OR SPONTANEOUS MENOPAUSE

It is recognized to have occurred after 12 months of amenorrhea for which there are no obvious pathological and physiological causes. It is a retrospective diagnosis. It occurs due to depletion of ovarian follicles resulting in near complete, but natural diminution of ovarian hormone secretion. There is no independent biological marker for menopause.

1.7.4.2 PREMATURE MENOPAUSE

It is the spontaneous menopause occurring two standard deviations below the mean estimated age for the reference population. Traditionally, it is considered to be below the age of 40 years. We may consider it as occurring below 38 years

1.7.4.3 INDUCED MENOPAUSE

The term induced menopause describes menopause caused by a medical treatment. Certain drug and radiation therapies can damage the ovaries and cause menopause. The most common cause is the surgical removal of both ovaries because of a medical problem. Hysterectomy, the removal of the uterus but not the ovaries, does not cause menopause. Cessation of menstruation follows bilateral oophorectomy or iatrogenic ablation of ovarian function.

1.7.4.4 TEMPORARY MENOPAUSE

It is a term preferably not to be used, since definition of menopause is complete cessation of menstruation. Rarely, ovarian function is interrupted for a period of time and later resumes.

1.7.4.5 EARLY MENOPAUSE

It is the time span between the spontaneous or iatrogenic menopause occurring between the age of 40 years and the accepted typical age of menopause for a given population.

1.7.4.6 DELAYED MENOPAUSE

It is not defined but may be important in terms of the increased problems associated with the hyper estrogenism and is used in this guideline. It is two SDs

above from the natural average age of menopause in a given population, may consider it to be beyond 54 years.

Menopause is a transition that may show up in many different ways. There are actually 12 different Menopause Types. In menopause, there are a number of possibilities: Estradiol & progesterone are both adequate, Estradiol is deficient, Progesterone is deficient, Estradiol & progesterone are both deficient. Add to those four possibilities the fact that Testosterone may be normal, Testosterone may be low, and Testosterone may be high. (Joseph J. Collins, 2010)

1.7.5 PHASES OF MENOPAUSE

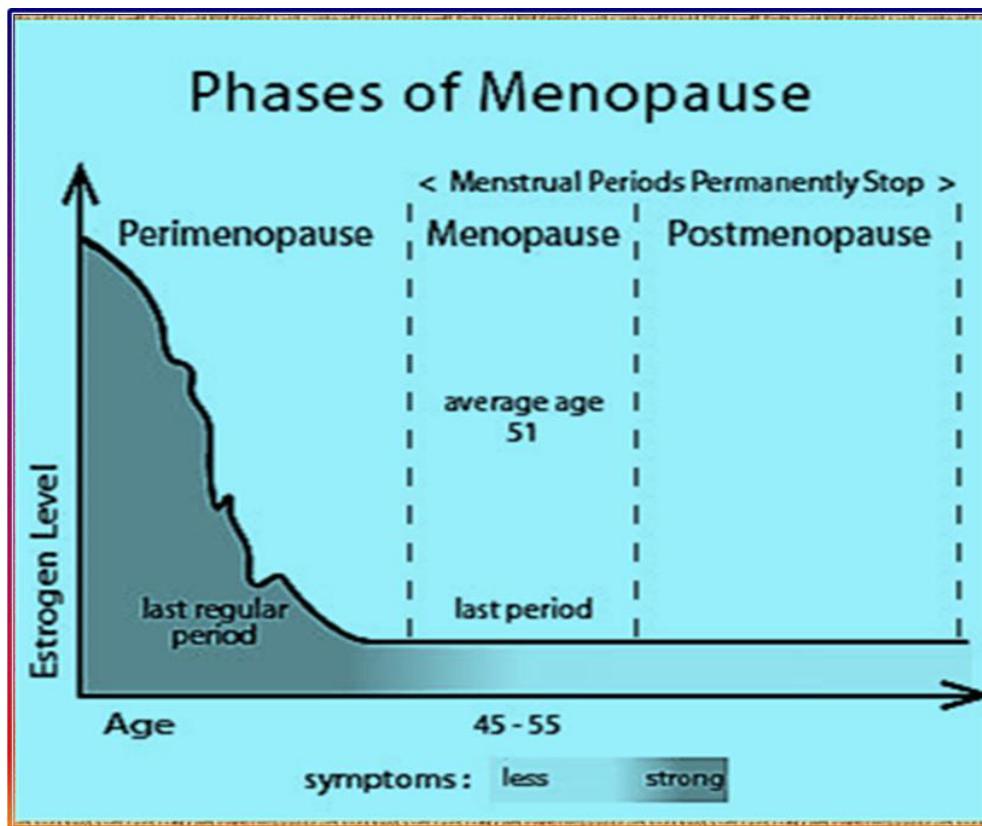


Fig 1

(Melissa Conard Stoppler)

1.7.5.1 PRE-MENOPAUSE

It is often used to refer the entire reproductive period, up to the final menstrual period.

1.7.5.2 PERI-MENOPAUSE

It is the period immediately prior to and up to one year after the final menstrual period. It may last for three to five years. The characteristics are increased blood levels of FSH, an ovulatory cycles, significantly reduced fertility and erratic menstrual periods, and onset of symptoms. This term is used interchangeably with menopause transition.

1.7.5.3 MENOPAUSE TRANSITION

During this period, disturbed menstrual cycle and endocrine changes are observed.

1.7.5.4 CLIMACTERIC

Literally, it means the rungs of a ladder. It is interchangeable with peri-menopause and menopause transition. When associated with symptoms, it is termed as the climacteric syndrome.

1.7.5.5 POST-MENOPAUSE

It is the span of time dating from the final menstrual period, regardless of whether the menopause was spontaneous or iatrogenic.

1.7.5.6 SENESENCE

It is the period after the age of 60 years. (Rossouw JE et al. 2002)

1.7.6 CAUSES OF MENOPAUSE

Menopause occurs due to a complex series of hormonal changes. Associated with the menopause is a decline in the number of functioning eggs within the ovaries. At the time of birth, most females have about 1 to 3 million eggs, which are gradually lost throughout a woman's life. By the time of a girl's first menstrual period, a girl has an average of about 400,000 eggs. By the time of menopause, a woman may have fewer than 10,000 eggs. A small percentage of these eggs are lost through normal ovulation in the monthly cycle. Most of the eggs die off through a process called atresia, the degeneration and subsequent resorption of immature ovarian follicles, fluid filled cysts that contain the eggs. Normally, FSH, or follicle-stimulating hormone which is a reproductive hormone is the substance responsible for the growth

of ovarian follicles during the first half of a woman's menstrual cycle. As menopause approaches, the remaining eggs become more resistant to FSH, and the ovaries dramatically reduce the production of estrogen. Estrogen affects many parts of the body, including the blood vessels, heart, bone, breasts, uterus, urinary system, skin, and brain. Loss of estrogen is believed to be the cause of many of the symptoms associated with menopause. At the time of menopause, the ovaries also decrease the production of testosterone—a hormone involved in libido, or sexual drive.

Natural decline of reproductive hormones, Late 30s, ovaries start making less estrogen and progesterone, the hormones that regulate menstruation and the fertility declines. In 40s, menstrual periods may become longer or shorter, heavier or lighter, and more or less frequent, until eventually on average, by age 51 have no more periods.

A hysterectomy that removes uterus but not ovaries are called partial hysterectomy usually doesn't cause immediate menopause. Although no longer have periods, ovaries still release eggs and produce estrogen and progesterone. But surgery that removes uterus and ovaries are called total hysterectomy and bilateral oophorectomy does cause menopause, without any transitional phase. Periods stop immediately, and key to have hot flashes and other menopausal signs and symptoms, which can be severe, as these hormonal changes occur abruptly rather than over several years.

Chemotherapy and radiation therapy, these cancer therapies can induce menopause, causing symptoms such as hot flashes during or shortly after the course of treatment. The halt to menstruation and fertility is not always permanent following chemotherapy, so birth control measures may still be desired.

Primary ovarian insufficiency is one of the main causes of menopause. About one percent of women experience menopause before age 40 years, premature menopause. Menopause may result from primary ovarian insufficiency, when ovaries fail to produce normal levels of reproductive hormones stemming from genetic factors or autoimmune disease. (Myo Clinic Staff, 2015)

1.7.7 SIGN AND SYMPTOMS OF MENOPAUSE

During the perimenopausal period some subtle and some not-so-subtle changes in the body may occur. Women may be incapacitated by symptoms that affect not only physically, but also emotionally and intellectually, although the two

symptoms classically associate with menopause are hot flashes and night sweats. There are other symptoms are the early symptoms such as mood swings later symptoms includes dry skin and sexual arousal.

Vaginal Urinary Symptoms: Discomfort in passing urine and frequent and urgent urination even there is little urine in the bladder due to low estrogen level.. Stress incontinence is one of the main symptoms of menopause due to increased pressure inside the abdomen. Sometimes urine escapes from the bladder on laughing, coughing or carrying a heavy weight. Genital dryness and itching, vaginal soreness, particularly during or after intercourse because the vagina fail to lubricate is also common among menopausal women.

Muscle and Joints Symptoms: Muscles lose the bulk, strength, coordination, and joints become stiff. Joint may swell, mobility become restricted pins and needles numbness in the hands. Carpal tunnel syndrome due to tissues bloated with water pressing on the nerve. Osteoporosis causes aches and pains all over the body.

Premenstrual Symptoms: if women have suffered from premenopausal symptoms include fatigue anxiety, irritability, tearfulness breast soreness, water retention; skin problems and insomnia are more likely to experience become menopausal.

Skin Symptoms: Dryness oiliness, wrinkles, flaking, bruises easily, wound heals slowly, brown pigmentation in the skin.

Hair Symptoms: Dullness, dryness, oiliness, split ends, poor growth, thin patches, dermatitis of the scalp, hair loss and dandruff.

Nail Symptoms: Brittles, white spots, splinter hemorrhages.

Eyes Symptoms: Dryness dark circles under the eyes, small yellow lumps of fat on the white part of the eyes, night vision deteriorates, red blood vessels around the corners of the eyes.

Gums Symptoms: Bleeding and sponginess, recession leaving tooth roots exposed, infection and periodontal disease. **Mouth Symptoms:** bad breath cracks on the corners of the lips, mouth ulcers that slow and heal. **Tongue Symptoms:** Thick white spots may appear and the sides may become scalloped.

Sexual Symptoms: dry vagina, heavy/irregular periods, loss of libido and painful sex. **Stomach and bowel Symptoms:** bloating with abdominal distention due to gas in the large intestine produced by fermentation. Diverticulitis is the condition

raise due to small pockets of tissues may balloon out from the bowel. Constipation is another frequent symptom at the menopause.

Breast Symptoms: Mastalgia is the condition develops sever pain hard and tender in the breast can last for up to ten years and breast soreness. **Heart Symptoms:** heart disease, crushing pain in the middle of the chest, pain radiate up into the neck, teeth and down the arm- usually the left arm but occasionally right arm due to insufficient oxygen is reaching the heart muscle. Palpitations and shortness of breath on exertion, dizziness, headache or blurred vision also the other symptoms. **Emotional symptoms:** tension, anxiety, depression, listlessness, tearfulness, mood swings, low self –esteem and confidence.

Intellectual symptoms: forgetfulness, feeling of pessimism, inability to concentrate or make decisions. And often incidentally includes Insomnia, lowering of the voice, lethargy, back pain, etc directly or indirectly related to drop of estrogen levels. (Miriam Stappard, 2001)

1.7.8 RISK FACTORS AND COMPLICATIONS OF MENOPAUSE

Health involves understanding of risk factors for different diseases. Risk factors are things in the life that increase the chances of getting a certain disease. Some risk factors are beyond the control. One may be born with risks. Risk factors that have little or no control over include one`s family history or a disease, sex, ancestry and age. One health problem may raise risk of having another health problem.

Menopause can increase the risk of certain problems due to lack of estrogen hormone support after menopause combined with the natural aging process in the post-menopausal years that women can become increasingly susceptible to illness.

Certain conditions, situations and habits are contributory risk factors like impaired peak bone density, low bone density, amenorrhea, hyperthyroidism, premature menopause, hysterectomy and surgical removal of the ovaries, smoking, and corticosteroids usage can lead to the complication osteoporosis.

Certain dietary habits are the greater risk factors like a high intake of animal protein, saturated animal fats and dairy products and early onset of menstruation and a late menopause, being over age of 40, obesity women taking oral contraceptives leads to complications of breast cancer.

Women who are obese, suffer from high blood pressure, diabetes, fibroids, disturbed menstrual patterns with long intervals between the periods are all at a higher risk of developing uterine cancer.

Diet that is high in meat and fat and low in fiber encourages the production and concentration of carcinogens, chemical substances that promote the development of colon cancer. Obesity, smoking, high blood pressure, lack of exercise, a cholesterol level, poorly controlled diabetes and a family history are the risk factors leads to complication of atherosclerosis, coronary artery disease, myocardial infarction, and stroke. (Miriam Stoppard 1997)

Heart and blood vessel disease: It is believed that one of the main reasons that ischemic heart disease is less prevalent among young women than young men is due to the effect of estrogen that proves to be protective for the heart and blood vessels. This protective effect is lost with menopause thus increasing the risk of cardiovascular diseases. Hence maintenance of a good diet and exercise routine is very important after menopause.

Another one major complication of menopause is osteoporosis. One out of every three women above 50 years is affected by postmenopausal osteoporosis. Lack of estrogen support make bones weak and put post-menopausal women at a high risk of sustaining fractures of the hips, wrist and spine.

Next one is urinary incontinence: Lack of estrogen support makes the weakening of bladder and pelvic floor muscles causes stress incontinence, pelvic floor muscles losing the tone. This leads to an inability to control the urge to urinate and pass urine without control. The likelihood to develop urinary tract infections is also high. The condition in which the uterus slips down into the vagina and/or protrudes out of the vagina as it loses support is known as uterine prolapse. Common in postmenopausal women who have had one or more natural deliveries; it is caused due to weakening of the muscles of the pelvic floor and the ligaments. (Roa S.R, 2015)

Risk factors one can control through following what should eat, how much physical activity can get, a healthy diet getting more physical activity and avoiding the use of tobacco, alcohol drink, use illegal drugs and stopping smoking .

1.7.9 MENOPAUSE IN MEDICAL POINT OF VIEW

The pattern of living in society contributes to good or poor health and causes of any abnormalities in women life stages, involves many aspects of women life.

Menopause is a good example of modern social life pattern. Menopause has several specific causes sign and symptoms and changes in physiological, hormonal and psychological functions.

1.7.9.1 PHYSIOLOGICAL CHANGES IN MENPAUSE

Menopause results from loss of ovarian sensitivity to gonadotropin stimulation, which is directly related to follicular attrition. The oocytes in the ovaries undergo atresia throughout a woman's life cycle, resulting in a decline in both the quantity and the quality of follicles. Thus, the variable menstrual cycle length during the menopausal transition is due more to a shrinking follicle cohort size than to follicle failure. Anovulatory cycles and absence of cyclicity become common, with a highly variable pattern of gonadotropin and steroid hormone production, estrogen insensitivity, failure of the luteinizing hormone (LH) surge, the occurrence of the final menstrual period, and permanent amenorrhea. Hormonal fluctuation may not be responsible for all irregular bleeding during this period; therefore, pelvic pathology like uterine fibroids, uterine polyps, endometrial hyperplasia, or endometrial cancer, which becomes more prevalent during this time. During the fifth decade of life, many women are lulled into a false sense of security, thinking that there are no longer fertile because of so close to menopause. Although fertility declines, pregnancy can still occur, as demonstrated by a relatively high rate of unintended pregnancies in women aged 40-44 years. Menopause is a physiological endocrinopathy occurring due to cessation of ovarian function.

High blood pressure contributes too many medical problems including heart attack, kidney failure and strokes. Activation of the stress response elevates blood pressure via such mechanisms as constricting arteries, conserving salt and fluids and increasing the contractile force of the heart muscle.

1.7.9.2 HORMONAL CHANGES IN MENOPAUSE

In the premenopausal years, pulsatile release of gonadotropin-releasing hormone (GnRH) stimulates the synthesis and release of follicle-stimulating hormone (FSH) and luteinizing hormone (LH) from the anterior pituitary gland. FSH, in particular, stimulates estradiol and inhibin B production by ovarian follicles. estradiol and inhibin B exert feedback on the pituitary gland and hypothalamus that, in turn, modifies the production of GnRH, LH and FSH. Co -

ordinated and timed production and release of pituitary FSH and LH result in the development of ovarian follicles, ovulation and menstruation. Inhibin B is produced by the ovarian granulosa cells and inhibits FSH synthesis and secretion. After menopause, the ovaries are depleted of follicles, estradiol and inhibin B production falls, and ovulation and menstruation no longer occur. The loss of ovarian responsiveness to FSH and LH, and the loss of negative feedback of oestradiol and inhibin B on the hypothalamic–pituitary unit, result in increased production and release of GnRH, FSH and LH. Increased FSH is particularly characteristic of post menopause.

Apparently when the estrogen levels are normal it keeps cortisol, the stress hormone in check, but when the levels of estrogen drop the cortisol gets out of control. Sustained high cortisol levels destroy healthy muscle and bone, slow down healing and normal cell regeneration, co-opt bio chemicals needed to make other vital hormones, impair digestion, metabolism and mental function, interfere with healthy endocrine function; and weaken the immune system. High cortisol can affect adrenal function. Adrenal fatigue may be a factor in many related conditions, including fibromyalgia, hypothyroidism, chronic fatigue syndrome, arthritis, premature menopause and others. It may also produce a host of other unpleasant symptoms, such as brain fog, acne and hair loss. Persistently elevated levels of cortisol can have adverse effect on the immune system, on body weight and on memory. (Santoro N, Randolph JF, 2011)

Sympathetic arousal resulting in increased catecholamines and cortisol levels mediated through the hypothalamic pituitary adrenal axis has been recognized to be the mechanism of increased stress, anxiety, vasomotor and perimenopausal symptoms.

1.7.9.3 PSYCHOLOGICAL CHANGES IN MENOPAUSE

Menopause is biological event but it involves psychological and social aspects also. Several psychological changes take place during perimenopause and menopause phase. During menopause many women become depressed, hostile and self-critical. They experience mood swings as well in order to understand the psychological problems, a psychological perspective is important. From a psychological point of view the menopausal transition has been identified as a non-adaptive event, during which women are at risk of losing a major role of maternity. In other words, this

transition can be called as an adjustment problem phase. Some of the psycho-social changes in life roles are not related to menopause; but these changes intensify the emotional problems of menopause as they usually co-inside with the time of perimenopause.

How successfully women make the adjustment to the physical and psychological changes that accompany the menopause is influenced greatly by their past experiences, especially their willingness to accept feminine sex role. Those who had poor adjustments earlier have psychological reactions to the menopause that are similar a tendency to overeat and become fat.

Anxiety may stem from traditional beliefs about the menopause which implies that women are at a risk. According to traditional beliefs menopause implies that women's health and happiness is in jeopardy and any false step can lead her to mental breakdown or serious physical illness. Menopausal problems may stem from the continuous dissatisfaction in women's adult life.

Psychological distress was reported more during perimenopause than during menopause or post menopause. Some study shows Psychological distress highest in early perimenopause. It was lower in premenopausal and postmenopause. (Sadhana Arya and Ishwar V. Basavaraddi, 2015)

1.8 TREATMENTS FOR MENOPAUSE

The treatment for women suffering with menopausal symptoms is often aimed improving pituitary function and balancing the function of the adrenal glands and pelvis.

Each woman needs an individualized health plan management. It is most important to distinguish between a symptomatic and an asymptomatic menopausal woman. Women with menopausal symptoms one or more medical treatment or using alternative medicine can help to ease the symptoms of menopause.

1.8.1 MEDICAL TREATMENT

Depending on the personal and family medical history, doctors may recommend estrogen in the lowest dose needed to provide symptom relief. If still have uterus, progestin in addition to estrogen. Systemic estrogen can help prevent bone loss.

1.8.1.1 HORMONAL REPLACEMENT THERAPY

Hormone Replacement Therapy involves replacing hormones previously produced by the ovaries. Systemic estrogen therapy which comes in pill, skin patch, gel or cream form remains the most effective treatment option for relieving perimenopausal and menopausal hot flashes, night sweats and dryness of the vagina. HRT can also help to reduce the risk of heart disease and osteoporosis following menopause. Facial hirsutism can increase after menopause due to hormonal changes. This growth may be slowed with HRT. HRT can be given as tablets, skin patches and as vaginal preparations such as creams and pessaries. Vaginal preparations can help to reduce symptoms of vaginal dryness, incontinence and bladder and vaginal infections. Some forms of HRT may increase the risk of endometrial cancer and using some forms of HRT for longer than five years may increase the risk of breast cancer. (Gulli,L.F.and Odle,T. G., 2006)

1.8.1.2 DRUGS

Vaginal estrogen to relieve vaginal dryness, estrogen can be administered directly to the vagina using a vaginal tablet, ring or cream. This treatment releases just a small amount of estrogen, which is absorbed by the vaginal tissue. It can help relieve vaginal dryness, discomfort with intercourse and some urinary symptoms. Gabapentin is approved to treat seizures, but it has also been shown to help reduce hot flashes.

Medical treatment could alleviate the menopausal symptoms but had many long term negative consequences and not considered safe. These drawbacks indicate a need to develop positive attitude to cope with menopause.

1.8.2 NON MEDICAL TREATMENT

Some women use complementary therapies and alternative medicines to relieve the menopause symptoms. Complementary therapies include acupuncture, reflexology, homeopathy and aromatherapy, naturopathy, yoga, diet etc. There is very limited scientific evidence to suggest that alternative therapies. There is a lack of good quality scientific evidence on the general effectiveness and safety of complementary therapies and alternative medicines. However, some women may find the therapies benefit general health and well-being or help with some menopausal symptoms.

In a world of ever- increasing technology and machine controlled medical interventions, people are beginning to feel the need for a human, individual touch: for a more natural approach to health that seeks to enhance life rather than dissect illness in to more obscure diseases, fortunately there are a number of natural therapies which have just such a positive, holistic approach and have also stood the test of time, to emerge as most rational way to sustain our health into the twenty first century. One of the strength of the natural therapies is the value in countering the effects of stress and helping to actually prevent illness. By reducing impact worries and stresses, many natural systems of treatment work to restore our vital energy and inner harmony.

Many Eastern cultures, such as those of China and India, have retained a strong tradition of therapies aimed at balancing energy and in recent years these have gained increasing attention in the West. Natural therapies not only have a long history, also have a bright future.

Menopause is a normal part of life, not a diagnosis. And there are healthful, natural ways to manage the changes it can bring. A low-fat, vegetarian diet, combined with regular physical activity, can help women reduce the symptoms of menopause. While hormone replacement therapy increases cancer and heart disease risk, these recommended healthy lifestyle changes actually reduce the risk of these illnesses, as well as other menopause-related problems. (Segasothy M, Phillips PA.1999).

Improvement in health care technology has resulted in increased life expectancy the number of persons old has increased. In India, the elderly constitute about seven percent of the total population and by 2016; the number is likely to increase to ten percent. Successful aging is defined not by longevity alone but also by sufficient well-being in multiple domain- socially, physically and mentally for successful aging are avoiding decease, engagement with life and maintaining high physical and cognitive function. Diet has a powerful yet complex effect on health. Diet modification required during diseased conditions and also normal life cycle (Srilakshmi.B, 2011).

1.8.2.1 DIET

A variety of diets prevail in India. Diet also will disclose the character of a person. The man`s endurance could be estimated. One who feeds on undesirable stuff would exhibit tendencies undesired by society. One who feeds on low protein diet will certainly be weak. Deficiency diseases are growing by leaps and bounds. For these

there is no cure through medicines. Only when protective foods are taken health will be restored. This miracle happens by the supply of the vitamins, minerals and salts, which had been absent. (Yogacharya Sundaram, 2004).

A healthy diet involves eating foods that provide all the nourishment that body for growth, tissue repair, and energy to carry out vital internal processes and to stay fit and active. In the last hundred years or so, the changes in eating habits in many countries have meant that large numbers of people have become overfed. Ironically, at the same time these dietary changes have left a lot of undernourished, lacking in vitamins, minerals and trace elements that would help to be in the peak of health. Eating for health does not have to mean switching to a fussy, complicated diet, or adopting every new fad that comes along, in the first place, a healthy diet should be an enjoyable one. For conventional nutritionists, food intake is broken down into various essential ingredients, such as carbohydrates, protein, fats, vitamins minerals, however, people generally do not think in this way but eat meals or snacks which are a mixture of various elements. What is the useful is to have an understanding of which foods contain which of these ingredients, and then to look at the overall balance within the diet. Balance is probably the key word in nutrition, and it is the unbalanced nature of many Western diets that lowers vitality and may lead to ill health. With a better understanding of the elements it is easier to create a healthy diet without too much thought and analysis.

People need do vary on quantity of food requirement vary throughout the life. Children and teenagers need more protein and most other nutrients due to the growth rates, pregnant women have an extra need too. Hard physical work or other activity increases demand, while older and less active people may require fewer calories. Overall need is varied, healthy and enjoyable food. Three key words are freshness, wholesome and variety. (Mark Evans 1996).

1.8.2.1.1 IMPORTANCE OF DIET

Monitoring and maintaining health is the key to continuing healthy, happy and active life. Observing and reading the messages the body sends and responding sensitively to bring a real sense of achievement as well as well-being. And there is no doubt about, it is not difficult to enjoy natural good health. Eating healthy food does make feel better, controlling weight does make look better and keeping fit and more energetic. (Miriam Stoppard, 2003)

Controlling how much one can eat is a twentieth century occupation and spawns a billion pound dietary products industry. In terms of maintaining a desirable weight it is a simple equation is food equal to calories which are used for energy, energy used for activity, input that is calories must equal to output that is activity, excess input means calories stored for future use it leads to fat storage increases. Excess output means fat stores mobilized to produce enough energy it leads to fat storage decreases. One should eat just what exactly body needs. But life style may be beyond the body`s needs and may not rely on the stomach to tell when to eat. Most people eat more out of social occasion, politeness and boredom than out of hunger, people eat more out of curiosity, tradition and timing than because the brains are telling to need nourishment. Because of the body`s signals about what one should eat, and when tempted with all kinds of tasty experiences one may opt for the interesting rather than nourishing. (Chrissie Gallagher-Mundy, 1995)

1.8.2.1.2 REQUIRED NUTRIENTS AND SOURCES

A person needs diet in order to grow and live. But nowadays diet is being taken to satisfy tastes, not hunger. Hospitals all over the world are full with persons who fall sick due to over eating. Fitness is directly related to health in order to remain fit quantity of diet does not matter at all. It is the quality and nutritive value of the diet which matters. A general idea about the diet and its constituents is necessary so that a balanced diet can be maintained and fitness can be achieved. The main constituents of the required diet are carbohydrates, fats, proteins, vitamins, minerals, roughage and water. (Sunil K. Sharma, 2009)

There are many diets being promoted to help burn fat or lose weight, however 95 percent of all diets fail to produce long term success. The problem is that fail to take in to consideration the hormonal consequences of the foods. There are three macro nutrients from the food sources needed by the body in large amounts and required for proper nutrition from Breads, fruits, juices, legumes, starches, vegetables, whole grains and all sugary sweet foods consist primarily of carbohydrate, Foods consist primarily of protein Chicken, dairy, eggs, fish pork, vegetables, soy product, etc. Another one fat, foods consist primarily of fat butter, oil, nuts, seeds, etc. (Joyce & Gene Daoust (1996)

Balance is an important to a healthy diet. The way of eating is affect the well-being, so knowing how to choose a healthy combination of foods is the first step towards improving eating habits and life style. (Kate Shapland, 1995)

1.8.2.1.3 TYPES OF DIET

There are literally hundreds of thousands of diets. Some are for losing weight, others for gaining weight, lowering cholesterol, living a long and healthy life, etc. A diet can be described as a set course of eating and drinking in which the kind and amount of food one should eat is been planned out in order to achieve weight loss or follow a certain lifestyle. Some types of diet are Atkins Diet, The Zone Diet, Vegetarian Diet, Vegan Diet, Weight Watchers Diet, South Beach Diet, Raw Food Diet and Mediterranean Diet.

In yogic literature, foods that are beneficial to human kinds are said to be Sattvic, or pure. Sattvic foods form an ideal diet, keeping the body nourished while being easy to digest. They create new energy, clarity and a clear, calm mind, enabling one to use all mental, physical, and spiritual abilities. Sattvic foods include cereal, fresh fruit and vegetables, milk, butter, nuts, seeds, lentils, rice, grains and honey.

Impure foods that can upset our physical or emotional balance are referred to as being Tamasic (stale) and Rajasic (stimulating). Too much of these foods can cause restlessness, agitation and a distracted mind. Foods in this category are sour or pungent foods, like onions, garlic, curry, fish, meat, eggs, salty or spicy foods and beverages, such as alcohol, coffee and black teas. (Carol DiPirro, 2010)

1.8.2.1.4 YOGIC DIET

Health has three qualities to it- Sattva, Rajas and Tamas. By the practice of yoga – Yama Niyama, Asana, Pranayama, prathyahara, Dharana, Dhyana and Samadhi, the body and mind, get cleansed of the aggressive and inert qualities (Bhagawan Sri Sathya Sai Baba)

A Yogic diet is a balanced diet that ancient Yogis believed had a huge influence not only over our physical well-being, but also over thoughts, and ultimately emotional and spiritual well-being. This diet can also be called lacto-vegetarian, which means that it is made up of non-animal foods with the exceptions of dairy items and honey. With continued awareness about the body through yoga one can find that vegetarian foods become a natural choice. It can also help maintain the same

energized, light feeling that is achieved through yoga. Also, if one who are going a more spiritual way who may decide that love for every living being outweighs the need for animal foods. Non-animal foods can help to attain a higher level of spirituality by generating positive energy. One should establish yogic diet in life, just a desire to live healthier and happier. Eating the right kind of food is important in achieving a healthy balance in the body and mind.

A true yogic diet may seem strict and not everyone wants to or can follow the rules. But even applying a few of these suggestions in the diet will enhance wellbeing. Yogic diet gives great improvement through regular yoga practice, without intentional eating, it can be limited. Make the effort to create a new life balance for happy life through a Yogic diet. (Carol DiPirro, 2010)

1.8.2.1.5 YOGIC DIET FOR MENOPAUSAL WOMEN

Diet is a good place to start. For hot flashes and mood swings, avoid spicy foods such as chili, cayenne and black mustard seed, vinegar, salty and sour foods. Instead, go for bitter, astringent and sweet foods including vegetables, rice, milk, wheat and pasta, fruit especially pears and plums, and spices such as cinnamon, coriander, cardamom, fennel and cumin seed. For memory loss or vaginal dryness, eat cooked, warm foods that are low in fat. Include sweet, sour and salty with a breakfast of cooked apples, prunes and figs to cleanse the digestive system. Under all circumstances, avoid packaged, processed, frozen, and canned foods including leftovers. Do eat organic when possible and foods that are cooked fresh on a daily basis. Diet should be whole grains, fresh fruit, vegetables and legumes. Should not eat meat, cheese, yogurt and frozen desserts. Should not skip meals and eating main meal at noon, and take meals at the same time each day so the body can count on the consistency. Asians consume up to six servings of soy foods a day, and as a result, they report a significantly lower rate of menopausal discomfort. (Cathy Taylor, 2008)

1.8.2.1.6 REQUIRED NUTRIENTS FOR MENOPAUSAL WOMEN

Eating right is always important, but it is especially essential during Menopause. A balanced diet supports balanced hormones. Menopause diet incorporates the following are daily diet Vegetables and fruit, Whole grains and legumes, Calcium-rich foods to fight osteoporosis, Soy, which contains plant

estrogens, Eight glasses of water, Less fat, white flour and sugar. Avoid intake of spicy food, alcohol and caffeine, which can exacerbate the problem.

For a moderately active adult, Britain's National committee on Nutrition Education recommends a diet that is low in fat, high in carbohydrates and moderate in protein. The committee's proposal for the long term suggest that no more than 30 percent of the calories come from fat, that around 11 percent come from protein and hence that 55 to 60 percent come from carbohydrates. A gram of fat equal nine calories, while gram of protein or carbohydrate equals four calories; therefore, if one who eats 2100 calories a day, approximately 70 grams of fat should be consumed, 310 grams of carbohydrates and 60 grams of protein daily. Menopausal women can follow a low fat high carbohydrate diet have a chance of developing heart disease, cancer and other life threatening diseases may be considerably reduced.

Iron requirement per day a minimum of 10 milligrams for men and 12 milligrams for women between the ages of 18 and 54.

High sodium intake is associated with high blood pressure in susceptibility people. Most adults restrict sodium intake about to about 2000 milligrams a day, according to the World health Organization. (Time Life Books, 1987)

1.8.2.1.6.1 NUTRIENTS FOR HORMONE BALANCE

Phytoestrogens such as soy Isoflavones found in soya beans, tofu, soya milk, soya flour and other soya based products are associated with a wide range of positive health benefits. Soy's two prominent isoflavones are genistein and daidzein. Once in the digestive tract, isoflavones are converted to the phytoestrogen composition by bacteria. While weaker than the body's estrogen, these „phytoestrogens“ may help to maintain health at menopause.

Gamma Linolenic Acid is an essential fatty acid found primarily in vegetable oils in the diet such as evening primrose oil, blackcurrant seed oil, borage oil and hemp seed oil. It is the precursor for the production of the protective and calming prostaglandin PGE1 which helps regulate hormonal balance and support menopausal health. It Synthesis two minerals, zinc and magnesium, and three vitamins, namely vitamin C, vitamin B6 and niacin for prostaglandin synthesis, and are essential for the natural synthesis of Gamma Linolenic Acid from Linolenic Acid and its conversion to prostaglandins.

1.8.2.1.6.2 NUTRIENTS FOR BONE HEALTH

As estrogen levels diminish in the female body during the menopause, bone density may lessen and can contribute to osteoporosis. Increasing calcium intake in milk, yogurt, cheese, sardines or small fish with bones, vegetable such as; broccoli, as well as nuts and seeds may help support a healthy bone density. To ensure that the calcium is fully absorbed and deposited in the bones, it should be combined with foods rich in phosphorus such as peanuts, meat, cheese, onions, garlic and combined with vitamin D in lentils and brown rice.

Over 300 enzymes require the presence of magnesium for catalytic action, including all enzymes utilizing or synthesizing ATP. Adult human bodies contain about 24 grams of magnesium, with 60 percent in the skeleton. Magnesium appears to facilitate calcium absorption and is found in fish like halibut, nuts, cereals, grains, seeds and vegetables, especially green leafy ones.

Avoid drinking tea and fizzy, carbonated drinks with meals and steer clear of high protein slimming diets which can all interfere with calcium absorption.

Vitamin D helps calcium absorption which is vital for strong bones and also helps maintain a positive calcium balance in women through all stages of menopause. Several other nutrients, including vitamin C, zinc manganese and omega-3 are related to bone health in women.

1.8.2.1.6.3 NUTRIENT FOR IMMUNE SYSTEM

There is much more to a healthy immune system than just Vitamin C. Zinc, iron, copper and vitamins C, E and B-complex can all help to maintain a healthy immune system. Selenium, vitamins A, C and E act are doing antioxidant action, while zinc, magnesium and copper act as co-factors in antioxidant enzymes.

1.8.2.1.6.4 NUTRIENT FOR ANTIOXIDANTS

Oxidative stress is caused by an imbalance between the production of reactive oxygen and a biological system's ability to detoxify or easily repair the resulting damage, i.e. in tissues. Free radicals can be created and cause damage to the cell, including proteins, lipids, and DNA.

Free Radicals are an important factor in the ageing process and are constantly formed in most cells and tissues. They are typically scavenged by antioxidants such

as vitamins A, C, and E; these antioxidants may help support the body from free radical damage.

Vitamin E is thought to help maintain the heat regulation capacity of the body and reduce the breakdown of the body's progesterone, hence it may help to maintain a healthy body temperature as well as have benefits to the cardiovascular system.

1.8.2.1.7 SOURCES OF NUTRIENTS FOR MENPAUSAL WOMEN

Zinc: shellfish, liver, oxtail and corned beef, chickpeas, pumpkin seeds, nuts, whole grains and cheese.

Iron: heme-Iron from; meat and fish sources – beef, pork, lamb, eggs and seafood, (pick red meats that are lean). Non-heme iron from: green leafy vegetables, spinach, asparagus, broccoli, collard greens, mustard greens, kale, parsley, cabbage, dried beans and certain fortified foods – cereals, oatmeal. Dried fruits – apricots, raisins, dates – prunes, figs.

Copper: liver, sesame seeds, raw cashews, soybeans, barley, raw sunflower seeds

Selenium: Brazil nuts, wheat germ, kidney and liver, oily fish including tuna, sunflower seeds, lentils, cashew nuts)

Vitamin A: liver (beef, pork, chicken, turkey, fish), carrots, broccoli – especially in the leaves, sweet potatoes, kale, butter, spinach and leafy vegetables and pumpkin.

Vitamin C: Colorful fruit and vegetables such as – rose hips, oranges, kiwi, lemon, berries –like blackberries, blueberries, strawberries, peppers, sprouts, kale and spring greens.

Vitamin E available from avocado, nuts such as almonds or hazelnuts and seeds, Spinach and other green leafy vegetables, Vegetable oils like sunflower and olive oil, Wheat germ, wholegrain foods, milk and asparagus.

Pantothenic acid is found in whole-grain cereals, legumes, eggs, meat, and royal jelly is known to play a role in supporting the function of the adrenal glands and adipose tissue, which form the body's major sources of oestrogens after the menopause. Pantothenic acid, along with vitamin B1 (Thiamin) found in: yeast, oatmeal, flax, brown rice whole grain flour, asparagus kale, cauliflower, potatoes,

oranges, pork liver may also help maintain the action of oestradiol. B vitamins play an important role in the central nervous system and brain methylation pathways, helping to maintain emotional balance during the menopause.

Vitamin B6 and **magnesium** complement each other to help maintain a healthy mood during the menopause. Moreover, vitamin B12, thiamine, niacin and folate are essential for a healthy nervous system because the brain has a special need for them to perform at its best, and is more sensitive to fluctuations in the body levels of these nutrients.

Vitamin B6: Good sources include meats, whole grain products, vegetables, and nuts.

Vitamin B12: meat, dairy products and eggs. Vegans may find it difficult to get enough vitamins B12 so should try to eat foods fortified with vitamin B12. These may include yeast extracts, certain vegetable stocks, veggie burger mixes, textured vegetable protein, soya milks, vegetable and sunflower margarines, and breakfast cereals

Niacin is essentially found in meat, wheat germ, dairy products, and yeast

Folate found in leafy vegetables such as spinach, turnip greens, lettuces, dried beans and peas, fortified cereal products, sunflower seeds and certain other fruits and vegetables. Liver and liver products also contain high amounts of folate.

A number of minerals, including chromium, magnesium and zinc, along with the vitamin C, B6 and y help to control the balance of glucose in the body. An imbalance of glucose can be associated with mood swings as are commonly experienced throughout the day, often resulting in difficulty getting to sleep.

Vitamins E, A and C plus **zinc** are important for keeping the vaginal membranes healthy as the declining estrogen levels tend to dry up the vaginal secretions, which in turn affects a woman's normal healthy sex life.

Iodine plays an important role in regulating the body's fat metabolism. The need for iodine increases with age and it may also help support a healthy cardiovascular system. Sources of Iodine are found in sea life, such as kelp and certain seafood, as well as plants grown on iodine-rich soil.

1.8.2.1.8 EATING HABBITTS FOR MENOPAUSAL WOMEN

Menopausal women needed to eat little and often to maintain blood sugar levels. Complex carbohydrates, such as oats, wholegrain bread, brown rice, may help

to sustain energy release, as blood sugar levels may have an effect on menopausal symptoms. Needed to avoid sugary foods, junk food, highly processed food, which can be high in salt and additives as well as sugar which can contribute to imbalances in blood sugar as well as weight gain. Must to eat plenty of fresh fruit, most are rich in potassium to help support a healthy fluid retention, eating fresh vegetables, especially dark leafy vegetables, which provide micronutrients. Drinking plenty of filtered water, to ensure good hydration and help maintain body temperature and fluid balance. Soya milk, a good source of protein, and may also contain phytoestrogens. Fresh squeezed fruit and vegetable juice, Herbal teas such as red clover is good nutrient sources for menopausal women.

Limit stimulants such as alcohol, coffee and tea – which can hinder the absorption of nutrients and produce heat in the body. Limit or moderate the intake of salt, too much can affect blood pressure and water retention. Limit saturated fat – which can affect blood lipid levels, the arteries and heart health.

Avoid spicy foods and hot foods and drinks and these can often make menopausal symptoms worse.

Keeping physically active during this time of change can help with many different health aspects; appetite, digestion, weight control, agility, heart health and bones health – and can have a powerful, positive effect on emotions, mental health and your love life. A combination of these following three types of regular exercise is recommended (Women Health Concern, 2009)

Proper nutrients intake make an enormous difference to specific symptoms. For general symptoms concentrate on taking magnesium, calcium and B vitamins. For hot flushes concentrate on taking vitamin E, essential fatty acids and ginseng. B vitamins and magnesium help to relieve anxiety. Concentrate on taking B vitamins, vitamin C and E and magnesium to come out from the depression. Magnesium, zinc, iron and B vitamins will all help to regain the libido for heavy period concentrate on iron diet. For skin problems concentrate on taking zinc and B vitamins. It is important to think carefully about the method of cooking as so many vital nutrients may be lost in the cooking process. Steam, stir fry or grill for preference and with as extra fat as possible, shallow and deep frying are the least healthy cooking methods as use a lot of fat. Boiling is another method to be avoided, with vegetables in particular, like vegetables with water may lose 50 percent of the nutrients. Vegetables with special case can steam over the boiling water or cook gently in a very little water. Cooking

vegetables in boiling water from the start may lose nutrients than started with cold water. (Maryon Stewart, 1995)

1.8.2.2 YOGA FOR MENOPAUSE

Yoga is the richest and noblest legacy the ancient Indians have gifted to the world. It is an experimental science and art of successful living. It is a way of healthy living at levels and tool for positive change. Yoga is a living tradition and a proven system of realizing divinity. Narendra Modi said that “Yoga gives to human being health assurance at zero budget”. Yoga is the golden key which unlocks the door to peace, tranquility and joy.

India is in need of a strong and healthy race of persons. Regular and judicious practice of the reliable yogic practices is needed for a stronger and healthy India. (Elangovan R, 2016)

The body can be thought of as the earth, the mind as the sea and the emotions as the seashore. If there is turbulence in the sea, it beats the seashore and drags it away from the land. A calm sea results in untroubled seashore. A calm mind produces a feeling of tranquility and is itself a healing factor. The emotional person who is worried and anxious may be destroying the body because of overactive mind Yoga can calm the mind and heal the body. (Swami Sankardevananda, 2010)

Yoga means union of human soul with the Supreme –Soul or God. The union implies the dualism of both Devine and human spirit. Yoga is the process which liberates the human soul from the bondage of Maya. There is no other bond stronger than the bond of Maya. But there is no other power greater than yoga and devotion to God to destroy the powerful bond of Maya. The union of soul with God requires the purity of body, mind, spirit and extreme devotion for God. Purity does not mean cleanliness or merely free from sexual impurity, but it is much more. The main exponent of yoga is Maharishi Patanjali. Food plays a prominent place in yoga. A yogi should take only moderate sattvic vegetarian diet. (Dharam Vir Mangla, 2004).

1.8.2.2.1 HISTORY OF YOGA

The yoga was developed as a part of the tantric civilization which existed in India and all parts of the world more than ten thousand years ago. In archaeological excavations more in the Indus Valley at Harappa and Mohenjo-Daro, now in modern

Pakistan, many statues have been found depicting deities resembling lord Shiva and Shakti performing various asanas and practicing meditation. These ruins were once the dwelling place of people who lived in the pre-Vedic age before the Aryan civilization started to flourish in the Indus subcontinent. According to mythical tradition, Shiva is said to be the founder of yoga, and Parvati was the first disciple of Shiva. Yoga arose at the beginning of human civilization when humankind first realized the spiritual potential and began to evolve techniques to develop it. The essence of yoga has often been shrouded in or explained by different symbols, analogies and languages. Some traditions believe that yoga was a divine gift revealed to the ancient sages so that humankind could have the opportunity to realize its divine nature.

In ancient times, yoga techniques were kept in secret and were never written down or exposed to public view and passed on from teacher or guru to disciple by word of mouth.

The first books to refer to yoga were the ancient Tantras and later the Vedas, which were written about the time the Indus Valley culture, was flourishing. The verses of Vedas were heard by the rishis, seers, in states of deep yogic meditation or Samadhi and are regarded as revealed scriptures. Yoga begins to take a more definable shape in the Upanishads. Sage Patanjali's treatise, the Yoga Sutras codified the first definitive, unified and comprehensive system of yoga often called the eight fold path. It is composed of yama, self-restraints, niyama, self-observations, asana, Physical postures, pranayama, Breathing Exercises, pratyahara, disassociation of consciousness from the outside environment, dharana, concentration, Dhyana, meditation and Samadhi, identification with pure consciousness.

In the sixth century BC, Buddha's influence brought the ideals of meditation, ethics and mortality to the fore and the preparatory practices of yoga were ignored, the yogi Matsyendranath taught that before taking to the practices of meditation, the body and its elements need purifying. Gorakhnath, chief disciple of Matsyendranath wrote the books of hatha yoga in the local dialect and in Hindi. Indian tradition previously required that original texts be written in Sanskrit. One of the most outstanding authorities on Hatha Yoga, Swami Swatmarama, wrote the Hatha Yoga Pradipika or light on yoga in Sanskrit, collating all extant material on the subject. In the Hatha Yoga Pradipika, Swatmarama starts with the body and only later, when the mind has become stable and balanced, are the yamas and niyamas introduced.

For most people in the 20th century, yoga was simply means of maintaining health and well-being in an increasingly stressful society. Today, in the 21st century, a spiritual heritage is being reclaimed of which yoga is very much a part. While yoga's central theme remains the highest goal of spiritual path, yogic practices give tangible benefits to everyone regardless of spiritual aim. Beyond the need of needs of individuals, yoga provides a real tool to combat social malaise. According to medical Scientist, yoga therapy is successful because of the balance created in the nervous and endocrine systems which directly influences all the other systems and organs of the body. (Swami Satyananda Saraswati, 2012).

Yoga traditionally divided into eight limbs or aspects called Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi. Yoga can also be seen as having three tiers; external, internal and innermost, or physical, mental and spiritual. Thus the eight limbs of yoga divided into three groups, Yama and Niyama are the social and individual ethical disciplines; Asanas, Pranayama and Pratyahara lead to the evolution of the individual, to the understanding of the self, Dharana, Dhyana and Samadhi are the effect of yoga which the experience of the sight of the soul.

Yoga works on each individual for the growth and betterment, physically, mentally, emotionally and spiritually. It is meant for the whole of humanity. That is why it is called sarvabhauma, a universal culture. There are tremendous balance to be achieved between the philosophical life and practical life.

Yoga is firstly for individual growth, but through the individual growth, society and community develop. (B.K.S. Iyengar, 2005)

1.8.2.2.2 TYPES OF YOGA

Amrtanadopanishad and Yogacudamani Upanishad mentioned patanjali's Ashtanga Yoga, Goraksha's Shadanga Yoga, Swatmaram's Chaturanga Yoga, Ghrenda's Saptanga Yoga, Amrtananda Upanishad's Shadanga Yoga and yogachudamani Upanishad's Shadanga Yoga.

Pujya Swamiji Gitananda Giri the codifier of the Rishi culture Ashtanga Yoga system agreed that sincere aspirants on the yoga path may know what tradition of yoga practitioners are entering and practicing.

Over the millennia innumerable types and traditions of yoga have grown up. Dr George Feuerstein of the Yoga Research and Education centre, USA, compiled the

list of forty types of Yoga are Ahaava Yoga, Adhyatma Yoga, Agni Yoga, Ashtanga Yoga, Asparsha Yoga, Bhakti Yoga, Buddhi Yoga, Dhyana Yoga, Ghatastha Yoga, Guru Yoga, Hatha Yoga, Hiranyagarba Yoga, Japa Yoga, Jnana Yoga, Karma Yoga, Kaula Yoga, Kriya Yoga, Kundalini Yoga, Lambika Yoga, laya Yoga, maha Yoga, Mantra Yoga, Naada Yoga, Pancadashanga Yoga, Pashupata Yoga, Patanjali Yoga, purna Yoga, Raja Yoga, Samadhi Yoga, Samkhya Yoga, Sampura Yoga, Samrambha Yoga, Saptanga Yoga, Shadanga Yoga, siddha Yoga, Sparsha Yoga, Tantra Yoga, Taaraka Yoga and Yantra Yoga.

Bhagavad Gita four major types of Yoga are Karma Yoga, Bhakti Yoga, Jnana Yoga and Raja Yoga. (Ananda Balayogi Bhavanani, 2004)

1.8.2.2.3 BENEFITS OF YOGA

Many of yoga benefits can be explained in facilitating better health on both preventive as well as treatment. The mechanisms of action provide a broad overview of how yogic tools including asanas, pranayamas, mudras, bandhas, kriyas and meditation can improve health.

A lack of flexibility in the hips can put strain on the knee joints, due to improper alignment of the thigh and shin bones. Back pain can be caused by tightness in the hamstrings muscles in the back of the thighs that lead to a flattening to the lumbar spine. Yogic postures increase flexibility of muscles and increase range of movement in different joints.

Muscle weakness contributes to numerous problems including arthritis, back pain and falls in the elderly. Many of the physical limitations that people associate with aging, including weakness and progressive disability, due to loss of muscle, a condition recently dubbed sarcopenia. Asana practice not only strengthen the muscles does so in a functional way, attending to every area of the body, balancing strength with flexibility.

Trip on the way to the bathroom in the middle of the night falls are a leading cause of hip fractures, the loss of independence and admission to a nursing home. Yoga helps in an overall more balanced way, left to right and front to back, which can help minimize the muscle imbalance that so often leads to bothersome symptoms and injuries.

Many yoga practices improve immune function; meditation has the strongest scientific support. Many back, neck and other muscle and joint problems can be caused or made much worse by poor posture, yoga can very effectively improve.

Yoga improves Lung Function through both posture and breathing. A slumping posture pushes the bottom ribs into the abdomen, restricting rib movement and further limiting the amount of air taken in, that leads to compromise the ability to replenish this blood rich area with oxygen and remove gaseous waste products. The better posture encourages will open the region of the lower ribs, improves vital capacity, breath holding time, as well as peak flow rate.

Mouth breathing dries out the mouth and is felt by dentists to contribute to a misaligned bite, bad breath and other problems. Yogic breathing much more efficient; slower breathing is calming to the nervous system. It promotes breathing through the nose on both inhalation and exhalation and discourages mouth breathing.

People who breathe quickly and shallowly eliminate more carbon dioxide from the lungs than desirable, causing the pH of the blood to rise. In response hemoglobin holds on to oxygen more tightly, meaning less gets to tissues in need. Less oxygen and nutrients being delivered to the tissue inhibits normal functioning. Twisting poses are wring out venous blood from internal organs, allowing more oxygenated blood to flowing once twist is released. Yogic relaxation increases blood flow to the periphery of the body, hands to feet.

Yogasanas improve joint health; if range of motion is limited; areas of the cartilage degenerate due to a lack of sustenance and become unable to cushion the bones. Asana practice can help improve the alignment of bones, potentially reducing the wear and tear. It nourishes the inter-vertebral disks. The cartilage that makes up the spinal disk lacks an independent blood supply and requires movement to deliver nutrients from nearby blood vessels,. A well balanced asana practice that includes back bends, forward bends and twists as well as gentle elongation of the spine helps prevent the drying out and denegation of these disks, helping the joints to do as shock absorbers between the vertebrae. Cushioning the vertebrae protects the nerves existing the spinal column from compression and impingement.

Veins can't push blood like artery. To move blood back from the periphery to the center depends on the movements of adjacent areas of the body. Upside down poses encourage venous from legs and pelvis to flow back to the heart.

Yoga postures increase circulation of lymph; a third system of vessels that circulates fluids throughout the body. It fights infection, kills rogue cancer cells and disposes of some toxic waste products of cellular functioning.

The Chinese saying, “Aging begins in the feet,” when the feet are not working properly, it can lead to problems in the ankles, knees, hips, lower back and beyond as the uneven forces are transferred upstream. Yoga teaches feet are the foundation of good posture. Alignment based yoga styles develop greater distance between the toes, metatarsals. Widening and stabilizing the base. Many common problems like fallen arches can be improved and sometimes even corrected by regular practice of standing yoga poses.

Most people with bad posture or dysfunctional movement and lack of awareness in preventing wrong doing and making changes. Body awareness is part of the larger concept of awareness that is central to all practice. Proprioception is the ability to feel where the body is in space, even with closed eyes. With greater awareness comes more control over the bodily function. Simple yoga practice lower the blood pressure, bring more blood flow to the pelvis to battling infertility and relation cure having trouble falling asleep. Excess cortisol both decreases bone formation and increases its breakdown.

In people with heart disease, a comprehensive lifestyle program that included yoga resulted in an improvement in the heart’s pumping ability. Yoga promotes weight loss; reductions in fat folds – at the back of the arms, beneath the shoulder blades and several other locations as well as body circumference.

Yoga relaxes the nervous system and improves its function. Improves brain function, activates the left prefrontal cortex and changes neurotransmitter levels. Higher blood sugar levels increase the risk of such common diabetic complications as heart attack, kidney failure and blindness. Yoga lowers the blood sugar in people with diabetes via weight loss and appears to improve sensitivity to the effects of insulin.

Yoga lowers the level of blood fats, including LDL and triglycerides, which are associated with many health problems including heart attack and pancreatitis. Regular yoga practice tend to drop triglyceride levels and HDL, high levels of which protect against heart attacks by acting as a fat scavenger within the bloodstream. Yoga thins the blood through reduces the tendency of platelets to aggregate into clots, as well as cuts the level of fibrinogen and encourages the breakdown of fibrin, two clot promoting proteins.

Stress is a big contributor to intestinal problems, from ulcer to irritable bowel syndrome. Asana practice can be beneficial in helping move food and waste products through the bowels.

Unnecessary, unconscious muscular gripping can lead to chronic tension in the wrists, arms, shoulders, neck and face and to muscle fatigue and soreness, which in turn can worsen the stress level and mood. Asana practice releases the muscular gripping.

Visualization and imagery play an important role in yoga practice and can help facilitate bodily and mental changes.

1.8.2.2.4 IMPORTANCE OF YOGA FOR WOMEN

Women, when compared to men, women have a special right to practice yoga. This is because of women are responsible for continuity of the lineage. Woman is the custodian of the seed of continuity and hence is called a field. If there are insects, worms and other such things in the field, the seed becomes useless. The body of a woman, when taken over by disease, fails its purpose. Therefore all women in this world have a special right to practice yoga. (Desikachar, 1995)

Yoga has a major contribution to women in middle years of life. The physical benefits may be felt as relief from specific ailments, an improvement in other physical problems and a whole sense of physical well-being. This can be a very powerful experience for some women who have lost touch with the body and who are alienated from the physical dimension. The mental and emotional benefits include an overall sense of relaxation and calmness, which act as a means to control stress and tension. At the spiritual level yoga can provide an enriching experience through kirtan and meditation. For those women who have lost contact with spiritual nature it can awaken this aspect and provide a means to realize a deeper center within the self.

1.9 INTEGRATED APPROACH OF YOGA THERAPY FOR MENOPAUSE

Integrative Yoga Therapy is a holistic, mind-body approach to health and healing which combines the ancient wisdom of yoga with the latest advances in body and mind practice. Different Yoga Schools follow yoga therapy for menopause with some specific uniqueness.

1.9.1 BKS IYENGAR APPROACH IN YOGA FOR MENOPAUSE

Uttanasana Adho Mukha Swanasana keeps a check on hot flashes also benefits those who suffer from pre-menstrual symptoms during pre or peri-menopause, the pelvic region gets broadened: the organic body is toned; menstrual regularities are checked. Vaginal dryness, urinary tract infections and incontinence which are common in menopausal women are also controlled. These asanas are also helping maintain bone density and avoid osteoporosis. .

Upavista Konasana against a viparita Dandasana bench control a heavy menstrual flow and help those with cysts, fibroid, abdominal pain and vaginal dryness. One experiences calmness and quietness in the reclining positions. Breathlessness, palpitation and fatigue which bothers one from time to time is also checked.

Janu Sirasasana and Paschimottanasana help in reducing irritability anger, anxiety, depression, palpitation and also soothe the nerves and quiet the mind, which remains confused and perplexed due to inner conflict.

Sarvangasana,, Supta Konasana, Setu Bandha Sarvangasana and Viparita Karani help to resettle the disturbed glandular system and re-establish the hormonal balance Sirasasana along with Sarvangasana maintain the uterus; checks the hot flashes, brings the understanding between the pituitary, thyroid, adrenal and ovarian glands and maintain hormonal balance, the breast become very tender and even the slightest touch makes it very painful. In Supta padangustasana and Supta Buddha konasana, the pelvis and groins get widened creating space in this region and also help those suffering from hot flashes, irregular menstruation, vaginal dryness, vaginal or urinary infection and incontinence.

Savasana finally puts the body and mind as a restful state. The feeling of exhalation and peace of mind is not difficult to attain during menopause. However, women need to have faith, determination and devote time. (Ramamani Iyengar Memorial Institute, 2009)

1.9.2 BIHAR SCHOOL OF YOGA APPROACH IN YOGA FOR MENOPAUSE

The system of hatha yoga contains many practices that are beneficial during menopause, such as the practices which control prana. The shatkarmas, the purificatory system of hatha yoga, must be done at least once every week. During

menopause hyperacidity takes place causing headache and migraine. Hatha yoga has a beautiful practice called kunjala to overcome hyperacidity.

Emotional stress is also experienced during menopause and is dangerous. Therefore, a woman should devote more and more time to the calm and quiet practices of concentration and meditation. (Satyananda Saraswati, 1984)

Menopausal women tend to be shallow breathers; the forced deep breathing which dynamic asanas produces can contribute to bringing new and positive habits of deeper breathing. Useful dynamic practices are pawanmuktasana II and III, surya namaskara, dynamic paschimottanasana, dynamic halasana, jhulana lurhakanasana, trikonasana variation, shashank bhujangasana and spinal twists.

The middle years are a time to deal with any unresolved issues from the past in order to move towards the future. Because of the mind, body, and spirit link, asanas can help to release pranic blocks and free mental and emotional tensions as they relax stiffness in muscles and joints. Pranayama involves influencing the breath and altering the flow of prana in the body. Because pranamaya kosha is the link between the annamaya kosha the manomaya kosha, the practices of pranayama can reach all the levels of the mind and influence the unconscious. These practices therefore help to resolve unconscious issues by clearing energy blocks and harmonizing prana. Useful pranayama practices include full yogic breath, kapalbhati, nadi shodhana, bhramari and mudras. Mudras create a link between the physical and pranic bodies which together influence the mental body. With the nadis clear and prana flowing freely, deep seated conflicts find channels to surface and be resolved.

Meditation, in particular antar mouna, can help to maintain physical, mental and spiritual health. The concept of karma yoga can provide new meaning to a woman's activity at menopause time. Personal sadhana can extend from morning asana, pranayama and meditation routine to include karma yoga and dealings with other people throughout the day. (Sannyasi Roopavati)

1.10 MENOPASE IN YOGIC POINT OF VIEW

Society today reflects the belief that disease, struggle and strife are natural to the human condition. Negative conditioning promotes ignorance, which prevents human kind from experiencing true potential, these negative thoughts get stored in the bodies, causing blockages that disrupt the balance of health. The aging of the body is largely an artificial process caused by stress, poor diet, indigestion of toxins and

exposure to the harmful rays of the sun. By purifying the body and keeping it supple, one can reduce the process of cell deterioration. (Janic Jerusalem, 2002)

Modern technology has provided with the means to examine the state of bodies, but nothing has helped discern character, personality or the potential for goodness. The most important aspect of a human being is the part which lies between the outer skin and the innermost soul – the Shakti, which includes the mind, intellect, emotions, vital energy, the sense of „I“ the powers of will and discrimination and conscience. These are different in every human being and that makes individually both mysterious and unique. In yogic terminology, the soul is called purusha Shakti, while prakriti Shakti or the energy of nature came to be called kundalini by ancient yogis. (B.K.S Iyengar, 2001)

In the tantric tradition, the woman is considered to be higher than the man so far as the tantric initiations are concerned. It is purely a spiritual attitude in relation to the evolution of higher consciousness. The frame, emotions and psychic evolution of woman is definitely higher than that of man. Awakening of the spiritual force – kundalini is much easier in the body of a woman than in the body of a man. (Swami Muktananda, 1983)

A healthy body is a resort for Atma, but a diseased body is like its jail. Body and mind have a natural power to cure it. In yogic point of view the energy aspects of menopause are of special one, many similarities between menopausal symptoms and the well-known esoteric goal of "awakening of the kundalini."

1.10.1 KUNDALINI STATUS IN MENOPAUSAL WOMEN

Kundalini is the name of sleeping dormant potential force in the human organism and it is situated at the root of the spinal column. In the masculine body it is in the perineum, between the urinary and excretory organs. In the female body its location is at the root of the uterus, in the cervix. (Swami Satyananda Saraswati, 2012).

The joy of menopause is the world's best-kept secret in order to claim that joy a woman must be willing to pass beyond the monsters that guard its gate. There are many similarities between menopausal symptoms and the spiritual goal of enlightenment, which is also known as "awakening the kundalini." Kundalini is the root of all spiritual experiences. Kundalini is a special kind of energy like hot, fast, powerful and large. In women, kundalini lives in the uterus or in the lower pelvis if

the uterus is taken by hysterectomy. Both puberty and menopause cause a woman's kundalini to move about in the body.

Before puberty, kundalini stays outside the body, it moves in the flow of life, but not moving inside. As puberty commences, a two-valved energy “gate” - imaginary opening, in the “root chakra” - lower pelvis opens, allowing kundalini to move up from the earth and into the root chakra. For little boys, this triggers the maturation of the testes; in little girls, the maturation of the ovaries and the beginning of menstruation.

For women, kundalini builds up day by day until it is released with menstruation. For as much as ten days before bleeding commences, the growing kundalini can intensify emotions and sensations, expose powerful feelings, trigger creative outpourings, and generate a house-cleaning frenzy. If pregnancy occurs, kundalini is not released; it grows throughout pregnancy and used for, and released in, birth.

At menopause, one “valve” of the root chakra gate closes. One valve remains open and allows kundalini to enter; but the closed one prevents it from leaving. Kundalini builds up in the pelvic tissues just as it does premenstrual. If this intense energy collects in the uterus for longer than usual, cramps and flooding accompany the delayed menses. If menstruation does not occur, the excess kundalini can dry out the vagina, erode the integrity of the hips, contribute to bladder weakness, and depress sexual desire.

If the kundalini is guided – by intention or by hot flashes – to move up the spine, then it confers enlightenment, not incontinence. It moves from the root to the crown, causing the head to glow with energy. Christian iconography depicts this as a halo. Aboriginal rock art shows the hair standing on end. Women call it the Crone’s crowning.

As the kundalini rises, it passes through six more chakras - energy gates, triggering symptoms along the way: menstrual pain, bloating, indigestion, heart palpitations, thyroid malfunctions, headaches, memory loss, emotional swings, sleep disturbance, bone loss, libido changes, and more. As all chakras are activated by kundalini’s hot flashes, everything has stored in all energy centers.

It follows that woman who has few menopausal symptoms have weak kundalini. Paradoxical as it seems, the more hot flashes a midlife woman has, the stronger and healthier. After kundalini awakes it becomes impossible to continue

believing that external reality is the sole reality No wonder old women are honored and feared throughout the world. (Susun Weed 2011)

1.10.1.1 YOGA FOR KUNDALINI AWAKENING

Kundalini can be awakened through yogic technique such as asanas, pranayama, kriya yoga and meditation. Then when one can able to direct the prana into the seat of kundalini, the energy wakes up and makes its way through sushmna nadi in the central nervous canal, to the brain. As kundalini ascends, it passes through each of the chakras which are inter connect. (Swami Satyananda Saraswati, 2012).

1.10.2 KOSHAS STATUS IN MENOPAUSE

In the tradition of Yoga and Upanishads there are five aspects of existence of man. The first and the grossest the physical frame which are familiarly is called Annamaya Kosha, the second subtler sheath is the Pranamaya Kosha featured by the predominance of Prana, the life principle, through the invisible channels called Nadis in this Sheath flow the prana. The next sheaths in the order of subtlety are manomaya ksha, vijnanamaya kosha and anandamaya kosha. While maomaya kosha are creative power predominates, in vijnanamaya kosha it is the power of discern and discriminate. Bliss is embodied in Anandamaya kosha, the highest stage of evolution the manifested existence. Man crosses these sheaths of existence one by one. Through analysis called Pancha kosha viveka and the associated practice called tapas man transforms by gradually getting relieved from the bond-ages and constructions of each sheath. This is one of the methods of reaching the ultimate goal. (Nagarathna.R and Nagendra.HR, 2012)

The ultimate goal of the human life is to move from the Annamay Kosh, most of the times remain in the Vigyanamay Kosh and gradually move into the Anandamay Kosh, a state of Blissful being.

At the time of Menopause, Women get imbalances in the Annamaya Kosha in the form of tension in muscles, fascia, joints and organs, in Pranamaya Kosha are disturbances, energy cysts or blocks and hyperactivity, in Manomaya Kosha imbalance is lack of focus, concentration. Agitation, in Vijnanamaya Kosha wrong understands, wrong notions and in Anandamaya Kosha there are no imbalances, everything is harmonious.

1.10.2.1 YOGA FOR KOSHAS

Yoga offers such a broad range of healing benefits, because it works holistically on the level of whole being, not just the physical body. According to yoga philosophy, human beings are not just in the level of physical body or mind, but are holistic, dimensional beings made up by many different, interactive levels.

Healthy living can be attained only if an individual is healthy in all spheres of the life. Leading a virtuous life leads to a healthy existence at physical, mental, Intellectual and spiritual level. Eating right kind of food, breathing a pure prana strengthens the Annamaya and Pranamaya Kosha. Engaging in contemplation and reflection strengthens the Manomaya and Vigyanamaya Kosha. Engaging in meditation and other spiritual activities strengthen the Anandamaya kosha.

1.10.3 CHAKRAS STATUS ON MENOPAUSE

Cycles and phases are part of what defines womanhood. More than any other earthly creature, human being bodies run according to cycles and phases, whether it is the monthly cycle of menstruation, or the life cycle of „mother-maiden-crone.

Menopause represents woman birth into the „wise woman“ phase of the life, Menopause is really meant perimenopause too, because as the medical community has come to realize, the life transit that menopause represents is actually one that spans ten years or more for many women. Hormonal shifts begin in the early 40s or even mid to late 30s, and with this comes the energetic, psychological, and spiritual shifts into wise woman years.

Changes to the subtle body in the chakras and energetics systems, mirror many of the changes in the physical body. In spiritual traditions that work with the chakras, working with these changes is a big part of the transition into wise woman status. This is the time of awaking what enables a shift into a new spiritual perspective and skills.

From an energetic technical perspective, this „prompting“ often occurs through bursts of kundalini, or spiritual awakening energy, in the chakras. (Mommy Mystic, 2016)

1.10.3.1 YOGA FOR CHAKRA BALANCING

Hatha yoga practice can help too. Menopause is complete when kundalini has cleared the chakras and can move freely up the spine and out the crown. Technically, mudras refer to a variety of yoga postures designed to prevent energy escaping from

the body. Mudra is excellent for improving the functioning of the liver, spleen, kidney, pancreas, bladder and uterus.

Mantras are sounds that reason in the body and evoke energy. The chanting of mantras calms the mind, awakens the senses and stimulates the chakras through repetition mantras can help the mind its quest towards enlightenment. The highest mantra of all is „Om“ yogis believe that is the sound by which the universe was created it means all that is infinity and eternity. (Janic Jerusalem, 2002)

1.10.4 NADIS STATUS ON MENOPAUSE

The Tantras have described a network of subtle channels known as nadis through which the life force circulates. Nadi means "stream". According to the tantric treatise Shiva Samhita, there are fourteen principal nadis out of altogether 350,000 in the body, the Prapanchasara tantra says 300,000 and gorakhsa satarka says 72000. Of these, Ida, Pingala and Sushumna are considered the most important. Ida is the left channel. Ida is white, feminine, cold, represents the moon and is associated with the river Ganga. Originating in Muladhara, Ida ends up in the left nostril. Pingala is the right channel. Pingala is red, masculine, and hot, represents the sun and is associated with the river Yamuna. Originating in Muladhara, Pingala ends up in the right nostril. Sushumna is the central channel and is associated with the river Saraswati.

When nadis are full of impurities vayu does not enter into the nadis. Impurities like waste and residue of sensuous living and desires. Just as excess fats accumulate around blood vessels and can eventually obstruct the flow of blood similarly on a pranic also there is an accumulation of wastes matter, the body's capacity to circulate energy level decreases and activation of the chakras and higher brain function is prevented. Impurities of nadis, more prevail during the menopausal stage.

1.10.4.1 YOGA FOR NADIS

The pranic body is the intermediate link between the physical body and the mind. Therefore, it can be approached from either side. It is, however, easier to control and purify the pranic body through the physical body. By strengthening the sympathetic and parasympathetic nervous system, ida and pingala nadis are directly affected, and by developing the central nervous system Sushumna is activated.

Therefore the most important practices of hatha yoga are those which arouse the central nervous system and sushumna. (Swami Muktibodhananda, 2012).

Kundalini Kriyas are powerful means of activating prana Shakti in the body so that the pranic channels, the nadis, are charged and cleaned of impurities which impede the flow of energy. And re-balance the sympathetic and parasympathetic nervous systems and reintegrate the endocrine glands this brings the adrenal glands back into the proper place. (Shankardevananda, 2003)

1.10.5 PRANA STATUS ON MENOPAUSE

Prana is the subtle energetic force that is responsible for respiration, oxygenation and circulation. In fact, Prana governs over all movement and sensory functions. Therefore healthy, vital Prana is needed for proper functioning of all channels (nadis), organs and systems in the body. Prana is the subtle essence of Vata dosha and thus is also comprised mainly of the elements, ether and air. Blockage of the movement of vayu in the nadi-s, kosha-, junctions of the nadi-s-granti-s and joints is always because of excess fat and flesh outside and inside the body. Excess fat and flesh are attributed more during the time of menopause. Prana has various “homes” throughout the body, including the brain, the heart center and the blood. If prana disturbed, these areas are likely to be the first to get affected. Low energy, fatigue, Weakness, depletion, Shortness of breath, Shallow breathing, Poor circulation, Coldness, Constriction in the body, Incorrect or distorted perception, Stuck feelings or emotions, due to Mental or physical exhaustion, Clogged channels due to constriction, toxins, or inflammation, Stress, Stuck, unprocessed emotions, Excessive, chronic caffeine use Poor sleep, Poor diet, Poor digestion, Toxins, Allergens. All the causes and signs fully matched with menopausal sign and symptoms. Free flow of prana is very essential to overcome the menopausal symptoms. Vibrant, free-flowing Prana is needed for a healthy body and a high quality of life.

1.10.5.1 YOGA FOR PRANA

Pranayama practices of yoga are specific techniques developed to balance the pancha prana in the body. This balance is achieved by creating channels for the breath by using specially designed breathing techniques. These techniques may be used by holding the body in a stable condition, which is a yogasana. (Firooza Ali Razvi (2015)

1.10.6 PANCHABUDHAS STATUS ON MENOPAUSE

The Varahopanishad says that the body made up of five elements, what is hard is earthy, what is fluid is of water, vital warmth is of fire, motion is of air, ether is the entire body. The number of times a person breaths in a day is 21,600. Breaths elaborate that when the earth region wasting away, hairs become grey; with the wasting of the fiery element, hunger and grace of form fade; with wastage of air, tremors appear with that of ether, life ceases. Hence, to maintain a healthy life, the elements should be attended to. (Krishna Raman, 1998).

At menopausal stage women get obese due to imbalance in the earth element, joint pain in the air element, hormonal imbalance in the water element.

The panchamahabuta concept can be applied to maintain health and promote healing. In a healthy body, the five elements are maintained in a particular proportion. When the state of the body is not in its natural harmony, the body will try to maintain its equilibrium by eliminating excess elements and taking in others. All disorders of the body are manifested because of a disturbance in this balance of the body's components. (Sapna, 2016)

1.10.6.1 YOGA FOR PANCHABUDHAS

Yoga is the vital airs are nourished then vital warmth increases. Consequently food is easily digested with healthy production of chyle. By this the humours of the body grow, which increases knowledge. (Krishna Raman, 1998)

By the wise selection of asanas, sequences may be formed such that the panchatattva, the elements in the body may be balanced. Balancing the elements leads to the balance of the trigunas of satva, rajas and tamas. In this manner physical and psychological wellbeing is ensured. So if the practice of yoga is adopted as a life style, it becomes easier to maintain the balance during the menopause.

1.10.7 TRIDHOSHAS STATUS ON MENOPAUSE

Menopausal variations can be attributed to the in equilibrium in the doshic status in this perimenopausal stage. It can also be correlated to the prakriti of the person, which help to assess the symptoms and management. Using these doshas of person, one can identify one's body-mind nature and use this understanding to make the most nourishing choices in the lives. These symptoms are more nearer to VataVridhhi symptoms, therefore its treatment may be of Vata. Further this period

belongs to Parihani Kala leading to Vriddhavastha, therefore Rasayana can be considered.

Between the ages of 16 to 50 pitta is considered to be the dominant force. Then make a transition into a period that is dominated by vata. It is the transition from pitta to vata that causes the menopausal symptoms. Human being is born with a fundamental constitution, or prakriti, that remains throughout the life. Acting upon the constitution are three bioenergetics influences, or doshas: vata, pitta, and kapha. As menopause is the transition stage from yuvavasthato vriddhavastha all the dosha will be in in-equilibrium stage which shows the different symptoms in the body. Dosha in menopause, these three doshas are the appearances or manifestations of natural forces at work in the body. Types of Menopause based on the doshas are 1) Vata dominated menopause 2) Pitta dominated menopause 3) Kapha dominated menopause

Menopause can be managed better by choosing the remedy according to the doshas. Few changes in daily activities and adopting the correct diet, phytoestrogen and life style will help to overcome from menopausal syndrome. Thus menopause can be made a pleasant affair by building healthy body and mind. (Pratima and Gayatri Bhat, 2013)

1.10.7.1 YOGA FOR TRIDOSAS

A smooth menopause transition and great health in the years to come can be achieved with the help of balancing dhoshas. Daily practice will not only help decrease bone loss, but will also help with balance and stamina, both very important factors in preventing bone fractures.

Yoga postures focusing on opening the hips and strengthening the pelvis and core, such as lunges Virabhadrasana I and II, Uttitha Parsvokonasana, Baddha Konasana, and Prasarita Padottanasana, will root vata and activate the root of the boney tissue, the pelvis and sacrum.

Diet plays a key role in balancing hormone during and after menopause. Variety and moderation are important because just as too much estrogen is unhealthy after menopause, too much phytoestrogen may also be dangerous apana vata, which governs the genito-urinary tract, elimination, and menstruation, is a key area to attend to when preparing for menopause, Drink plenty of warm water throughout the day. Eat plenty of cooked, leafy greens, as this helps elimination and also a good source of calcium. For both pitta and vata imbalances, a breakfast of cooked apples and prunes

and fig is a good way to start day, as it balances the doshas and cleanses the digestive track. (Rakhi Mehra and Basavaraddi I.V, 2015)

Nature has created the mechanism in the women`s body to provide for this universal balance. Menstruation and menopause, As such times, the careful sequencing of yogic practices and diet recommendation help for repair and recovery.

1.11 YOGA FOR PHYSIOLOGICAL HEALTH OF MENOPAUSE

Yoga has many components in its practice and each of have a synergic relation and impact. Asanas and pranayamas enhance flexibility, movements, coordination, reduce stiffness, pain, and improve lung power and host of other physiological functions.

Asanas, pranayama and dhyana, the components of yoga therapy helps to improve the symptom profile through several physiological mechanisms. The intense stretching and muscle conditioning associated with attaining and holding yoga postures increases the skeletal muscle oxidative capacity and decrease glycogen utilization, possibly caused by increased vascularization, increased intramuscular oxygen and glycogen stores or by increased numbers of mitochondria, increase muscular strength and endurance, flexibility, cardiorespiratory fitness, body composition and pulmonary function of menopausal women. Yoga practice also may increase the absorption of the calcium from the intestine, stimulate bone remodeling and maintain the load bearing capacity of the bone, reduces the pain in the back of the head, neck, lower back and headache by influencing limbic system modulation of endogenous pain control system. (Nayak G et al. 2014)

1.12 YOGA FOR HORMONAL BALANCE OF MENOPAUSE

Yoga reduces the effect of menopause`s hormonal changes by balancing the endocrine system. The regular practice of various yogic asanas – standing, sitting, lying down along with back bends forward bends, twists, lying down along with back bends, forward bends, twists and inverted poses stimulates and activates all the glands, organs, tissues and cells of the body. Inverted poses are particularly important during menopause as they have a powerful effect on the neuro-endocrine system, allowing fresh, oxygenated blood to flow to the glands. (Mishra.J.P.N, 2015)

Regular yogic practices have significant effect on mental agility by increasing the amount of oxygen supplied to the brain and slow down the loss of dopamine in the brain. (Miriam Stoppaed, 1997)

1.13 YOGA FOR PSYCHOLOGICAL HEALTH OF MENOPAUSE

Yoga can play a pivotal role in management of menopausal psychological problems. Yoga has increasingly been utilized as a therapeutic tool to achieve positive health and mange diseases. Yogic life style helps in improving the body, mind and day to day life of individuals. Yoga practice improve the functioning of nervous system leading to increase in alpha rhythm, intra hemispheric coherence and homogeneity in the brain and increase in P 300 phase amplitude all of which seems to enhance the cognitive processes. Menopausal anxiety can be a very difficult symptom to manage, but yoga therapy improve through several mechanisms like altered neurotransmitters, changed brain blood flow and brain metabolism and sympathetic activation seems to be responsible for this improvement brought by yoga practice. (Nayak G et al. (2014)

1.14 PRESENT STATUS OF YOGA

Yoga constitutes without any doubt one of India`s many priceless gifts of perennial value to the human family. Despite being a very ancient tradition, it has all along proved ever so modern and relevant to every generation of seekers of human perfection, its potentialities have always been immense and its contributions manifold as well as in tune with the needs of the present age of Science, Technology and Engineering. In fact, as this planet awaits the next millennium, Yoga seems to have approached its zenith in popularity, fascination and usefulness in more parts of the world than ever before. (Anantharaman T.R, 2005)

1.15 YOGIC PRACTICES WITH DIET MODIFICATION FOR MENOPAUSE

Eat, drink, and be merry for tomorrow ye diet.

-William Gilmore Beymer

Whenever there is a conflict between will power and imagination, the imagination always wins.

-Jose Silva

There are plenty of books, magazines have stressed the message on diet for healthy life adjust the number calories consume to the amount of energy expend and one can get healthy life easily. Mind helps to make the changes in the body requirements. (Jose Silva, 1999)

Yoga advocates total health through Deha Suddhi, Nadi Suddhi, Prana Suddhi, Citta Suddhi and Atma Suddhi. And also yoga promotes the pillars of positive health are Aachaar- character or conduct, Vichaar –through processes, Vyavahaar – inter personal dealings and Aahaar – diet.

Yoga combined with nutritious diet benefits balance, coordination, a decrease in pain and improving the quality of life. Yoga balances the secretion of leptin, a hormone produced in the stomach which regulates food intake and can also change the sensitivity of the nerves in stomach that signal fullness. Yogic practices can regulate estrogen trigger serotonin to inhibit binge eating. Plant diet, simple exercises and meditation needed for anti-aging. (Elangovan R, 2016)

Menopause is a normal part of life, not a diagnosis. And there are healthful, natural ways to manage the changes it can bring. A low-fat, vegetarian diet, combined with regular physical activity, can help women red

uce the symptoms of menopause. While hormone replacement therapy increases cancer and heart disease risk, these recommended healthy lifestyle changes actually reduce the risk of these illnesses, as well as other menopause-related problems. (Segasothy M, Phillips PA, 1999)

Yoga therapy will be effective only if it is prescribed along with proper dietary regulating. Without the help of appropriate food, yoga therapy alone will not be adequate. Therefore, the yoga therapist must have reasonably enquired about the existing dietary habits of the individual and definitely suggest appropriate modifications in the diet however, the changes introduced in food must be gradual and moderate should never be drastic and extreme.it should also be more in the nature of suggestions rather than mandates. Only the combination of `aharam` - food and `viharam, day to day lifestyle works effectively. (Chandrasekaran.N, 2012)

Yoga warranted the exploration of life style approaches which provides support to women through the transition period. Yoga as a holistic life style strategy forms a natural solution which incorporates diet, exercise and mind oriented practices for managing menopause. Probably the two most obvious and successful ways in

which can affect the health are through nutrition and exercise. A healthy diet and adequate exercise are essential for health. (Latha Satish, 2015)

From the yogic perspective, menopause is a moving away from a more rajasic time of life towards a more sattvic time of life transition from the Householder to the Forest Dweller stage of life.

1.16 REASONS FOR SELECTION OF THE TOPIC AND THE VARIABLES

Menopause is a time period in a women's life that brings a lot of physiological changes like high level of blood pressure, pulse rate and Body Mass Index. Estrogen level starts decreasing, high level of Follicle Stimulating Hormone and high cortisol levels are associated with numerous symptoms and conditions including bone loss, high blood pressure, insulin resistance and diabetes, weight gain, memory impairment and immune system suppression, fatigue, hot flashes, cold chills, joint pain, headaches, dry skin, back pain, etc. This is not just limited to physiological change but there are lots of psychological problems as well, like anxiety, low level of adjustment and self-confidence that are a result of low estrogen levels. The menopausal transition can be challenging for a number of women. Menopause is considered as a hallmark of aging. This belief contributes to the emotional stress of a woman going through this phase of life. There has been extensive research on menopause in the West, but in India only a few institutes have recognized the potential of research on subject. Very little research has been done on menopause in Indian context as there is a need to recognize menopause as an issue in women health care. So the researcher has chosen the topic and the variables which would help the society to better understand the benefits of yogic practices and diet modification to motivate the women to improve the quality of life.

The variables selected for the study were based on the discussions with experts, availability of tools, feasibility of the criteria, and the relevance of the variables to the present study. Hence, the investigator selected the research entitled "Effect of yogic practices with and without diet modification on selected physiological, hormonal and psychological variables among menopausal women".

1.17 OBJECTIVES OF THE STUDY

1. To find out whether there was any significant difference in selected physiological variables among menopausal women due to yogic practices with and without diet modification.
2. To find out whether there was any significant difference in selected hormonal variables among menopausal women due to yogic practices with and without diet modification.
3. To find out whether there was any significant difference in selected psychological variables among menopausal women due to yogic practices with and without diet modification.

1.18 STATEMENT OF THE PROBLEM

The purpose of the study was to find out the effect of yogic practices with and without diet modification on selected Physiological, Hormonal and Psychological variables among Menopausal Women.

1.19 HYPOTHESES

It was hypothesized that there would be significant differences between yogic practices with and without diet modification groups and control group on selected Physiological, Hormonal and Psychological variables among Menopausal Women.

It was hypothesized that there would be significant differences between yogic practices with diet modification group and yoga practices without diet modification group on selected Physiological, Hormonal and Psychological variables among Menopausal Women.

1.20 SIGNIFICANCE OF THE STUDY

- The significance of this study is to improve the knowledge and to provide a systematic approach to yogic practices with comparative advantages of diet which in turn is useful to assess the degree of improvement in the women's general health.
- The study may also be useful for women of yoga and serves as a guide to demonstrate the importance of yogic practices in the overall development of women.

- This study may be helpful to the future research scholars to select new problems related to the Menopausal women.
- This study may give an idea of physiological status of the Menopausal women.
- This study may give an idea of hormonal status of the Menopausal women.
- This study may give an idea of psychological status of the Menopausal women.
- This study would help the yoga therapist working in hospitals and rehabilitation centre to assess the present standing of Menopausal women.
- This study would further motivate for further research on the related variables.

1.21 DELIMITATIONS

- The study was confined to 45 Peri-Menopausal Women only.
- The study was delimited to the Peri Menopausal Women in Chennai city only.
- The age group of the subjects was ranged from 40 to 50 years only.
- Only selected yogic practices and diet were used during this study as independent variables.
- The dependent variables were selected physiological variables such as Blood Pressure, Pulse Rate and Body Mass Index, Hormonal variables Estradiol, Follicle Stimulating Hormone and Cortisol and Psychological variables Anxiety, Adjustment and Self-confidence only.

1.22 LIMITATIONS

The following factors were the limitations of the study.

1. Socio-economic status was not taken into consideration.
2. Climatic conditions have not been considered.
3. Lifestyle was not considered.
4. Day to day activities was not controlled.
5. Other diseases have not been considered
6. Medication was not controlled.
7. Diet habits of yogic practices without diet modification group and control group have not been controlled.

8. Diet modification instructions only have been given on diet to yogic practices with diet modification group. Personal verification of the subjects was considered as limitation

1.23 MEANING AND DEFINITIONS OF THE TERMS

1.23.1 YOGA

The word Yoga is derived from the Sanskrit root „yuj“ meaning to bind, join, attach and yoke, to direct and concentrate one’s attention on to use and apply, union or communion. It is the true union of individual will with the will of God. (B.K.S. Iyengar, 2008)

1.23.2 DIET

The word diet comes from old French diete and Medieval Latin dieta meaning "a daily food allowance". A diet can be described as a set course of eating and drinking in which the kind and amount of food one should eat is been planned out in order to achieve weight loss or follow a certain lifestyle. (Christian Nordqvist, 2015).

1.23.3 YOGIC DIET

A diet that is wholly conducive to the practice of yoga and spiritual progress is called yogic diet. Diet has intimate connection with the mind. Mind is formed out of the subtlest portion of food. (Swami Sivananda)

1.23.4 MENOPAUSE

Menopause refers to the time after the ovaries have stopped releasing eggs, levels of the female hormones estrogen and progesterone drop, menstrual periods cease and it is no longer possible to conceive a child. (Timothy McCall, MD, 2007).

1.23.5 PERIMENOPAUSE

Perimenopause is the period of time when woman’s body is preparing for menopause. Peri means “before” or “around”. Perimenopause can precede menopause by one or two to five or six years. Perimenopause is the time of transition between a woman’s childbearing years and the cessation of menstruation. (Deborah S. Romaine and Maureen Miller Pelletier, 2000)

1.23.6 BLOOD PRESSURE

Blood flow through blood vessels under pressure that is blood pressure. When the heart contracts during systole, the pressure rises, this is the maximum blood pressure called the systolic blood pressure. When the heart relaxes during the phase of diastole, the blood pressure is at its minimum, and is called diastolic blood pressure. (Shankardevananda Swami, 2003)

1.23.7 PULSE RATE

Pulse is the throbbing of the arteries which happens because of heart beat. The pulse results from pressure waves moving through the pliable blood vessels. It is not caused by the forward movement of blood. Pulse rate is the count of pulsations for one minute. In normal situations it denotes the rate of cardiac contractions or heart rate. Normal pulse rate for an adult individual is between sixty and eighty. (Chandrasekaran, 2012)

1.23.8 BODY MASS INDEX

The body mass index is a value derived from the mass (weight) and height of an individual. The BMI is defined as the body mass divided by the square of the body height, and is universally expressed in units of kg/m^2 , resulting from mass in kilograms and height in metres. (Malcolm Kendrick, 2015).

1.23.9 ESTRADIOL

Estradiol is the primary sex hormone of childbearing women. It is formed from developing ovarian follicles. Estradiol is responsible for female characteristics and sexual functioning. Also, estradiol is important to women bone health. Estradiol contributes to most gynecologic problems, including endometriosis and fibroids and even female cancers. (Janelle Martel, 2015).

1.23.10 FOLLICLE STIMULATING HORMONE

Follicle-stimulating hormone (FSH) is an important part of the reproductive system. It's responsible for the growth of ovarian follicles. Follicles produce estrogen and progesterone in the ovaries and help maintain the menstrual cycles in women. In men, FSH is a part of the development of the gonads as well as sperm production. (Joanna Goldberg and Lydia Krause, 2016)

1.23.11 CORTISOL

Cortisol is a life sustaining adrenal hormone essential to the maintenance of homeostasis. Called “the stress hormone,” cortisol influences, regulates or modulates many of the changes that occur in the body in response to stress including, but not limited to Blood sugar (glucose) levels, Fat, protein and carbohydrate metabolism to maintain blood glucose (gluconeogenesis), Immune responses, Anti-inflammatory actions, Blood pressure, Heart and blood vessel tone and contraction and Central nervous system activation. (James L.Wilson, 2001)

1.23.12 ANXIETY

Anxiety is an emotion characterized by an unpleasant state of inner turmoil, often accompanied by nervous behavior, such as pacing back and forth, somatic complaints and rumination. It is the unpleasant feeling of dread over something unlikely to happen, such as the feeling of imminent death. Anxiety is not the same as fear, which is felt about something realistically intimidating or dangerous and is an appropriate response to a perceived threat, anxiety is a feeling of fear, worry, and uneasiness, usually generalized and unfocused as an overreaction to a situation that is only subjectivity seen as menacing. (Seligman, M.E.P, et al. 2013)

1.23.13 ADJUSTMENT

Adjustment is defined as a process wherein one builds variations in the behavior to achieve harmony with oneself, others or the environment with equilibrium between the individual and the environment. (Manichander.T, 2016)

1.23.14 SELF CONFIDENCE

The concept self-confidence as commonly used is self-assurance in one's personal judgment, ability, power, etc. One increases self-confidence from experiences of having mastered particular activities. (Snyder, C. R. Lopez, Shane J.2009).

In the next chapter the investigator has dealt with the literature related to yoga, diet, physiological, hormonal and psychological variables and menopause. The reviews quoted in the second chapter gives the reader an idea about the present study.