CHAPTER I
INTRODUCTION

1.1 INTRODUCTION

“Yoga is supreme success of life”  - Bhagavad Gita

1.2 LIFE

Life is God’s gift. Principles followed in life are important. Life needs two important things: Peace and Health. Looking at life through the mirror of art was once pleasurable but knowing that there was no meaning of life made the mirror “useless, superfluous, ridiculous and painful”. Attitudes are essential towards the meaning of life: living in ignorance of the problems, admitting the problem and trying to maximize their pleasure.

1.2.1 PURPOSE OF LIFE

The purpose of life is not buying a car, big house, delicious food and fulfilling the desire. When won the great prizes and can buy all the things that which one want. But someday people are getting older: the eyes getting worse and legs getting weaker can’t able to remember what to eat. Good people are called legends. A legend people will still talk about even more than 100 years later. They create a trial for people to follow. So be a legend.

1.2.2 NORMAL PEOPLE

They knew the problem well, their lives were full of suffering, not pleasure, killing them is taboo and they can explain why they perform every act. Believe faith and need to learn how to dream. Keep the dream alive, reach goals. Some people don’t decide or have a vision of what they want out of life. No goals, People with goals can see what they eventually want to achieve and they can see just how to get there.
1.2.3 TYPES OF PEOPLE

Ones that make things happen

Those that let it happen

The ones that do not know what happened.

A goal is simply a target which an individual or organization intends to reach or achieve. Goals are specific, written down, measurable, time frame, read out loud frequently and posted visibly. So take it easy, do what want to do and appreciate nature. Life is a fragile, Life is short.

1.2.4 DIFFERENCES BETWEEN DREAM AND GOALS

A dream is a fantasy: it does not have any boundaries. It is a goal without legs. A dream can be the guiding passion of life: a goal is a more clear and vivid target that want to attain. Goal is always accompanied with a plan. It is aim or objectives that want to achieve. Finally a dream becomes a goal when action is taken towards achieving it.

1.3 HAPPINESS

Born is to live in happiness. Birth is not for being tortured by Diseases. Happiness is the birth-right. The whole creation is meant to endow the 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 order to live in happiness and peace, god is certainly not going to prevent from being happy(Manivannan L 2014).

It is one who lose the own happiness. It is not lost through the fault of others. The responsibility is self only. Disease represents only the reverse state of happiness. When the body losses it balances it becomes ill. Peace and happiness are twin-expression of the same quality. Without peace there is no happiness and the absence of happiness denotes loss of Peace. Illness of the body will attack the mind also. Mental illness will affect the body. The mind which is ill adversely affects the brain,
the nervous system and finally destroys the entire body. Real pleasure or happiness is not born from anything bad. It does not lead to any evil result.

1.4 HEALTH

The World Health Organization of the United Nations as the “State of complete physical, mental, and social well-being and not merely the absence of disease and infirmity”. Disease represents only the reverse state of happiness. When the body losses it balances it becomes ill. Peace and happiness are twin- expression of the same quality. Without peace there is no happiness and the absence of happiness denotes loss of Peace. Illness of the body will attack the mind also. Mental illness will affect the body. The mind which is ill adversely affects the brain, the nervous system and finally destroys the entire body. The real pleasure is near to nature and productive of good results.

Healthy is life given naturally peacefulness. The purpose of life is to lead happiness. Health is usually defined as the absence of disease. Health is joy, Health is wealth. Healthy has aspect, Diet, Sleep, Exercise, Relaxation (Dr. Swami Muktananda 2013).

Achievement of optimal growth and development, reflection is the full expression of one’s genetic potential. Maintenance of the structural integrity and functional efficiency of body tissues is necessary for an active and productive life and mental well-being. Ability to withstand the inevitable process of ageing with minimal disability and functional impairment, and Ability to combat disease, such as Resisting infections (immune commence), Preventing the onset of degenerative diseases such as cancer and Resisting the effect of environment toxins and pollutants. (Swami Karmananda, 2008).
1.4.1 CAUSES OF ILL - HEALTH

Accumulation of toxins
Hormonal imbalances
Imbalance of electrical activities
Neuron hormonal imbalance
Imbalance of Vata, Pitta, Kapha
Impurity of Genes
Blockages in the energy body

1.4.2 FACTORS INFLUENCING HEALTH

Many factors combine together to affect the health of individuals and communities. Whether people are healthy or not, is determined by their circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health, whereas the more commonly considered factors such as access and use of health care services often have less of an impact.

1.4.2.1 DETERMINANTS OF HEALTH

The social and economic environment, the physical environment, and the person’s individual characteristics and behaviors are the determinants of health. The context of people’s lives determines their health, and so blaming individuals for having poor health or crediting them for good health is inappropriate. Individuals are unlikely to be able to directly control many of the determinants of health. These determinants or things that make people healthy or not include the above factors, and many others: Income and social status - higher income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater is the differences in health. Education low education levels are linked with poor health, more stress and lower self-confidence.
Physical environment safe water and clean air, healthy workplaces, safe houses, communities and roads all contribute to good health. Employment and working conditions people in employment are healthier, particularly those who have more control over their working conditions. Social support networks greater support from families, friends and communities is linked to better health. Culture - customs and traditions, and the beliefs of the family and community all affect health. Genetics inheritance plays a part in determining lifespan, healthiness and the likelihood of developing certain illnesses. Personal behavior and coping skills balanced eating, keeping active, smoking, drinking, and how we deal with life’s stresses and challenges affects health. Health services access and use of services that prevent and treat disease influences health. Gender Men and women suffer from different types of diseases at different ages.

1.5 WOMEN

The feminine ideal is molded in accordance with the division of labor in any society. It has usually fallen to men to engage with the outside world (be it hunting or business) to provide the family with material necessities, and it has been the woman’s responsibility to nature the children and maintain the home in which they are raised. This probably arose because women do need at least some assistance during the final stages of pregnancy and the early life of the baby. This tends to put women in dependent position on men for at least a few years during their lives. During these years, the horizons of a woman’s life are circumscribed almost entirely by the home. Women in such a situation are obliged to become highly conscious of the emotional tone within the family and neighborhood groups. It is by virtue of her training for the family that a woman is brought up to be passive, compliant and unaggressive, and encouraged to develop the intuition that informs her private world of emotion and sensation.

It is widely believed that women are naturally less well endowed with the ability to think, to act, to create. Yet there is no evidence, biological or psychological for any such incapacity in women. Studies of sex-differences in the achievement of children do not provide any objective support for this bias. Girls and boys have been
tested on reading, counting, mathematical reasoning, and spatial cognition, abstract reasoning, set breaking and restructuring, perceptual speed, manual and scientific skills.

1.5.1 TRADITIONAL WOMEN

There have always been women who have actively and positively chosen an alternative to marriage. Yoginis, the priestesses of ancient Greece and Phoenicia, witches, nuns, saints and religious aspirant throughout time all these women have found fulfillment outside marriage and motherhood. In families everywhere there have always been unmarried women who are useful and loved as daughters, sisters, aunts, rather than as wives and mothers.

Today more women and more look beyond the traditional feminine roles for the full expression of their potential. Just as once there were mighty queens and empresses, now women are once again taking part in the government of their countries, even at the highest levels. Women have entered the law courts and surgeries: they are engineers and architects: scientists, teachers, nurses and artists: psychological, social workers and executives. Women are increasingly taking and making opportunities to lead constructive and fulfilling lives in a world that was once the sole prerogative of men.

1.5.2 YOGA FOR WOMEN

In ancient times, Yoga was practiced by women. First guru is Lord Siva and his disciple is Parvathi. Yogi Yajanavalkya taught the secrets of yoga to his wife Gargi. In the Ramayan, it is said that Rama’s mother Kaushalya practiced pranayama. Yogi Nathamuni emphasizes the importance of yoga to women and expectant mothers. Innumerable statues of yoginis like Tara engraved side by side with those of Buddha prove that yoga was for both men and women.

Krishnamacharya’s wife was doing yoga when she was expecting her daughter in 1900’s. Today there are as many women practicing
1.5.3 OTHER GREAT WOMEN YOGINIS

Parvathi
Rani soodalai
Madalasa
Sulabha
Mira

1.6 MIDDLE AGED WOMEN

It is the period of age beyond and adulthood but before the onset of old age. Various attempts have been made to define this age, which are around third quarter of average lifespan of human being. Middle age is not defined solely by chronological age but is a product of biological, psychological and social and factors.

Women and Yoga have a deep connection as women have great amount of changes going in the body every month and then due to sudden changes in the middle aged women their mood disturbed. Also during the onset of middle aged women makes they lose their mind as some feel that is the loss of their beauty. Hence practicing yoga will help as it is gentle from of physical and biological fitness.

1.7 FITNESS STATUS AMONG MIDDLE AGED WOMEN:

Two out of ten women doing physical activity. (most of them not aware on that)
Middle aged women period racing the risk of heart attack, depression, and stress disease and disorders occur.
One out of ten women having difficulties their life, not having peaceful life.
Four out of ten women having heart ailment problems.
Tree out of four women getting miscarriage.
1.8 DISEASE

“Disease of the soul are more dangerous and more numerous than those of the body”

- (Cicero).

Illness and sickness are generally used as synonyms for disease, however, this term is occasionally used to refer specifically to the patient’s personal experience of their disease. Sleep is essential for life. Sleep restores the energy levels of the body and prepares to welcome the day with full vigor. Unfortunately many people suffer from disordered and abnormal sleep (Dutta Ray 1988).

World level is having 4448 types of disease. In this list more important of Hypertension. It’s simply called silent killer in human beings.

Disease is an abnormal condition of an organism that impairs bodily functions, associated with specific symptoms and signs. In human beings, “disease” is often used more broadly to refer to any condition that caused pain, dysfunction, distress, social problems, and/or death to the person afflicted, or similar problems for those in contact with the person (Chandrasekar K 2013).

1.9 CAUSES OF DISEASE

Errors in thinking about causality the following reflect common mistakes in thinking about causes of disease, Genes cause disease is due to "Lifestyle". Environment accounts for most variation in disease rates. Family history of a disease, e.g. cancer, is seen as indicating “high-risk” status. But those dying younger have less chance to manifest disease, so offspring have “less ” family history, those living longer more likely to develop disease, but longevity ignored as benefit to offspring. All disease is a product of gene-environment interaction. Genes specify protein structures only when genes come into contact with an environment is their advantage or disadvantage apparent, environment could be cellular or geographic. Lifestyle, (includes ageing, nutrition, infection, toxin exposure)
1.10 HYPERTENSION

Hypertension is a state in which Systolic blood pressure is above 140 mm Hg and diastolic blood pressure above 90 mm Hg.

High blood pressure in the main arteries which carries oxygenated blood from the heart to the body causes the heart to work too hard and is known as Hypertension.

Under and over activity of the genes FGf23, APOC3, TRS1, 9p21 are other cause of HBP

Improper biological clock and insufficient electrical activity are the main causes.

Over secretion of vasopressin hormone in the brain causes HBP.

High blood pressure is the leading disease in the world.

Every year, 17 May is dedicated to World Hypertension Day (WHD). This is an initiative of the World Hypertension League (WHL), an affiliated section of the ISH.

The WHD was first inaugurated in May 2005 and has become an annual event ever since. The purpose of the WHD is to promote public awareness of hypertension and to encourage citizens of all countries to prevent and control this silent killer, the modern epidemic.

The theme for World Hypertension Day is ‘Know Numbers’ with a goal of increasing high blood pressure (BP) awareness in all populations around the world.

Sitting and standing for long periods of time leads to high blood pressure. Metabolically healthy obese persons are also at higher risk of high blood pressure. More than 18 percentages of the Indian men between fifteen years and forty nine years are suffering from hypertension. More than 13 percentages of the Indian women between fifteen years and forty nine years are also suffering from hypertension.
1.11 DATA ON HYPERTENSION

Every four seconds, one woman dies due to heart issues globally. Six out of ten women at the risk of developing heart ailment. 33 crore Indians suffer from Hypertension. Now added 7 crore due to systolic and diastolic pressure level was reduced. (Indian and Institute of health metrics and evaluation-2017).


Physical inactivity increases the risk of HBP by 61%. Under and over activity of the Genes FGf23, APOC3, TRS1 and 9p21 are other causes of High blood pressure.

Improper biological clock and insufficient electrical activity are the main causes. (American Heart Association's Council on Hypertension-2017).

High blood pressure is one among the 50 big killers in the World

Salt intake is double and dangerous of Hypertension risk in India (Delhi – 14.13gm/day, Kolkata – 9.81 gm/day, Mumbai – 10.21 mm/day, Bangalore and Chennai 9.38 gm/day) (Times of India – Dec-17-2016 Sat).

The average hearts beats almost 90,000 times per day. With each beat, the heart expels blood into the arteries strong, muscular tubes that carry blood to all parts of body, branching into smaller and smaller tubes along the way. When the heart beats, it generates force, which is transferred to the blood. As blood leaves the heart, it carries this force with it into the arteries. This force pushes on the walls of the arteries and the arteries push back, helping to propel the blood forward into the body. This force also causes pressure within the arteries, which is called blood pressure. Blood pressure measurements consist of two numbers. The systolic pressure is measured while the heart is contracting, and is the larger of the two numbers. The diastolic pressure is measured while the heart is relaxing, and is smaller than the systolic pressure. These two pressures are written together, like this: 120/80, and pronounced "120 over 80." Both the systolic and diastolic blood pressure is important
determinants of cardiovascular risk, so both are used in evaluating overall blood pressure status.

Believe it or not, medical experts used to think blood pressure is supposed to get higher as got older. The idea was that we needed higher blood pressure to push our blood through our arteries as they stiffened with age. Now know that high blood pressure is not inevitable and it’s never good for health. Also know this: Simple changes in diet, exercise and the way we handle stress can do wonders for lowering blood pressure to healthy levels.

Blood pressure is one of the best barometers of overall health and one of the best predictors of risk of illness. While high blood pressure may cause no obvious symptoms, left untreated it can damage blood vessels and the organs they feed, including the heart, kidneys, eyes and brain.

If diagnosed with hypertension, the medical term for high blood pressure, have lots of company: More than 65 million adults in this country have the condition (defined as blood pressure of 140/90 or higher). At least sixty five (65) million more people are at risk of developing it, either because they have pre-hypertension their blood pressure is higher than optimal but not quite in the danger zone or because they have diabetes, heart disease, kidney disease or other conditions associated with hypertension.

Family history study found that regular exercise, good diet and other healthy habits reduced hypertension rates by as much as 69 percent among women who had a family history of the condition. Probably heard this before, but there’s no getting around it: What eat can have a major effect on blood pressure, for worse or for better. In fact, research shows that healthy eating get to what that means in a minute can lower blood pressure and keep it there. What’s more, a blood-pressure-friendly diet doesn’t have to be an exercise in deprivation. In fact, it can be downright delicious.
1.12 TYPES OF HYPERTENSION

Major types of hypertension (high blood pressure) are as follows:

1.12.1 PRIMARY HYPERTENSION

Primary hypertension also known as essential hypertension is the most common type of hypertension. For this type of hypertension, there is no single identifiable cause. There is no apparent underlying disease, condition or disorder causing the high blood pressure. Instead, hypertension occurs because of genes, diet and lifestyle.

1.12.2 SECONDARY HYPERTENSION

Secondary hypertension is a less common form of the disease that occurs because of a specific condition. Disorders including sleep apnea, tumors and kidney failure can all cause hypertension to occur as a side effect.

1.12.3 MINOR TYPES OF HYPERTENSION

These are less common types of hypertension which are as follows:

1.12.3.1 MALIGNANT HYPERTENSION

Malignant hypertension is high blood pressure that occurs suddenly and drastically. A person might experience numbness in the body as well as vision problems, extreme fatigue, confusion, anxiety and seizures. There are various diseases which may cause this condition, including scleroderma, kidney disease, spinal cord injuries, tumors of adrenal gland, use of illegal drugs like cocaine, and the use of certain medications like birth control pills. When the underlying condition is cured, the blood pressure goes back to normal.
1.12.3.2 ISOLATED SYSTOLIC HYPERTENSION

Isolated systolic hypertension does not have an identifiable cause. This type of hypertension is a result of old age and a poor diet. The arteries become stiff, resulting in a high systolic number with a normal diastolic number.

1.12.3.3 WHITE COAT HYPERTENSION

White coat hypertension occurs only when a person’s blood pressure is taken in a clinical setting. Outside of a doctor's office, blood pressure is normal. It is believed that these patients feel extremely stressed when they visit a clinic or doctor's office.

1.12.3.4 RESISTANT HYPERTENSION

Resistant hypertension is called such when three medications fail to successfully treat the condition.

1.13 STAGES OF HYPERTENSION

Normal – 120/80 mm Hg
HBP -140/90 mm Hg and above
Stage I HBP > 159/99 mm Hg (moderate)
Stage II HBP >160/100 mm Hg (severe)

1.14 IMPORTANCE OF BLOOD PRESSURE

When measured as an average value over a long period of time (weeks to months) the blood pressure is an important value that directly affects how likely are to have a heart attack, suffer a stroke and develop other problems, like kidney failure.

While blood pressure by itself cannot say that definitely will, or will not, suffer any of these ailments, a very large body of scientific research has shown
that high blood pressure (also known as hypertension) is a strong risk factor for developing a wide range of medical problems.

1.14.1 SHORT-TERM CONTROL OF BLOOD PRESSURE

Heavy bleeding or a sudden change in posture may cause a rapid change in blood pressure, to which the nervous system immediately responds. Bar receptors (stretch receptors in the walls of the major arteries) detect pressure changes and send signals along sensory nerves to the brain. An autonomic response adjusts the heart rate, volume of blood pumped, and arterial diameter to restore normal pressure.

1.14.2 RESPONSE TO FALLING BLOOD PRESSURE

Bar receptors in the aorta and carotid arteries, which supply the head, detect a fall in blood pressure and send signals to the brain. The brain sends signals to the heart and blood vessels to restore normal pressure.

1.14.3 LONG-TERM CONTROL OF BLOOD PRESSURE

Blood pressure is controlled in the long term by the action of hormones. The kidneys respond to low blood pressure by secreting renin. This hormone is converted into angiotensin, which constricts arteries and raises blood pressure. The adrenal glands, hypothalamus, and heart also respond to high or low pressure by secreting aldosterone, vasopressin and natriuretic hormone respectively. These hormones alter the amount of fluid excreted by the kidneys, which affects the volume of blood in the body and hence the blood pressure. (Search the Medical Encyclopedia).

1.14.4 HYPOTHALAMUS

It is the region in brain lying below thalamus and making up the floor of the third cerebral ventricle. The hypothalamus is an integral part of the brain. Hypothalamus is a small cone-shaped structure that projects downward from the brain, ending in the pituitary (infundibular) stalk, a tubular connection to the pituitary gland. The hypothalamus contains a control centre for many functions of the
autonomic nervous system, and it effects on the endocrine system because of its complex interaction with the pituitary gland. The hypothalamus lies below the thalamus in the walls and floor of the third ventricle. It is divided into medial and lateral groups by a curved bundle of axons called the fornix, which originate in the hippocampus formation and project to the mammillar body. The hypothalamus and pituitary gland are connected by both nervous and chemical pathways. The posterior portion of the hypothalamus, called the median eminence, contains the nerve endings of many neurosecretory cells, which run down through the infundibular stalk into the pituitary gland. Important structures adjacent to the median eminence of the hypothalamus include the mammillary bodies, the third ventricle, and the optic chiasm (a part of the visual system). Above the hypothalamus is the thalamus. The hypothalamus, like the rest of the brain, consists of interconnecting neurons that are nourished by a rich supply of blood. To understand hypothalamic function, it is necessary to define the various forms of neurosecretion.

Hormones are balance the Heart rate, Blood pressure, body temperature, Hunger.

1.14.5 THALAMUS

The thalamus is a small structure within the brain located just above the brain stem between the cerebral cortex and the midbrain and has extensive nerve connections to both. The main function of the thalamus is to relay motor and sensory signals to the cerebral cortex. It also regulates sleep, alertness and wakefulness.

All sensory information enters this structure where neurons send that information to the overlying cortex. In hypothalamus pituitary gland secretion anterior and posterior two type of hormones.

1.14.6 ANTERIOR HORMONES

Growth hormone

Thyroid- stimulating hormone
Adrenocorticotropic hormone
Follicle-stimulating hormone
Luteinizing hormone
Prolactin

1.14.7 POSTERIOR HORMONES

Oxytocin
Vasopressin
Oxytocin (stored)
Anti-diuretic hormone (stored)

1.14.8 ANTI-DIURETIC HORMONE (ADH)

Anti-diuretic hormone (ADH) secreted from post Pituitary are also known as Vasopressin

Function

Decreases urine output
Decreases water loss through sweating
Increases blood pressure through vessel constriction

Regulated By

Blood Osmotic pressure and blood volume
Dehydration - Solute conc. of blood plasma increase
Hemorrhaging – loss of blood volume
Diarrhea – loss of fluids
Functions of Hypothalamus

Figure 1

Decreased Na+ or Increased K in blood- Decreased blood volume and / or blood pressure) Kidney). If the kidney working to absorption of Na+ and water – increased K – in excretion leads to blood pressure

Due to Stress – Hypothalamus released Corticotrophi n-hormone by Anterior pituitary (increased blood volume)- ACTH, Then heart will receive Atria natriuretic peptide (ANP) – inhibitory effect mineral corticoid- producing part of adrenal cortex, Enhance secretion of Aldosterone targets kidney tubules.
Functions of Vasopressin

Although no direct cause has been identified, there are many factors such as sedentary lifestyle, smoking, stress, visceral obesity, potassium deficiency (hypokalemia), obesity (more than 85% of cases occur in those with a body mass index greater than salt (sodium) sensitivity, alcohol intake, and vitamin D deficiency that increase the risk of developing hypertension. Risk also increases with aging some inherited genetic mutations, and having a family history of hypertension. An elevated level of rennin, a hormone secreted by the kidney, is another risk factor, as is sympathetic nervous system over activity. Insulin is resistance, which is a component of syndrome X (or the metabolic syndrome), is also to contribute the hypertension. Recent studies have implicated low birth weight as a risk factor for adult essential hypertension.
Secondary hypertension by definition results from an identifiable cause. This type is important to recognize since it's treated differently to essential hypertension, by treating the underlying cause of the elevated blood pressure. Hypertension results in the compromise or imbalance of the path physiological mechanisms, such as the hormone-regulating endocrine system, that regulate blood plasma volume and heart function. Many conditions cause hypertension: some are common and well recognized secondary causes such as Cushing's syndrome, which is a condition where the adrenal glands overproduce the hormone cortisol. In addition, hypertension is caused by other conditions that cause hormone changes such as hyperthyroidism, hypothyroidism (citation needed), and certain tumors of the adrenal medulla (e.g., pheochromocytoma). Other common causes of secondary hypertension include kidney disease, obesity/metabolic disorder, pre-eclampsia during pregnancy, the congenital defect known as coarctation of the aorta, and certain prescription and illegal drugs. The following Figures shows about Arteries pressure extension by blood and Damaged arteries, Blood pressures in arteries in walls and systolic and diastolic pressure in blood vessel.

Figure 3  Figure 4
There are some risks to dramatically lowering blood pressure. People would likely need to take more medications than they already do, and undergo more lab testing. Taking multiple blood pressure drugs can increase the risk of low blood pressure and symptoms like fainting. Still, “think most patients may prefer taking extra medication to reduce their risk of early death, stroke or heart attack.” Ultimately, hopes there will be more shared decision-making between doctors and patients, with conversations that discuss evidence that lower blood pressure goals could prevent more health problems. Any kind of stroke can be serious. The patient can experience long term effects, even death after a stroke. Doctors say there are warning signs people need to be aware of to lower their risk for having a stroke.

A neurologist with the biggest risk for having a hemorrhagic stroke is high blood pressure. “There are two types of strokes: one is an ischemic stroke. It’s what call a stroke where there’s not enough circulation to a part of the brain and then can become paralyzed or lose speech because the part of the brain that’s getting that blood supply is impaired. That constitutes to about 80 to 85 percent of all strokes.” The other is a hemorrhagic stroke. It’s caused by bleeding in the brain. While it’s not as common, doctors say it can be more serious. “Fifteen percent of all strokes are bleeds, so it’s not rare. They can be very dangerous too, depending on the size and the location. It’s slightly more dangerous in terms of survival than a regular stroke, but the deficits can be the same in both.” Hemorrhagic strokes are typically associated with high blood pressure. They have fewer warning signs and can be sudden, causing temporary paralysis, loss of speech, or a terrible headache. “High cholesterol is a risk factor, stress can be a risk factor, but by and large hypertension is the main risk factor.” Patients with high blood pressure need to increase their physical activity and
modify their diet. “know now that a third to 50 per cent of patients don’t take their medications so that’s why have these problems,” Whi le hemorrhagic strokes typically happen in advanced age, doctors say they can happen to anyone with uncontrolled high blood pressure. It’s important to monitor blood pressure and make necessary changes to lifestyle. (Manivannan L 2014)

1.15 ANATOMY OF CIRCULATORY SYSTEM

1.15.1 FUNCTIONS OF THE CIRCULATORY SYSTEM

The function of a human’s circulatory system is to transport blood around the body. The blood itself also carries numerous other substances which the body requires to function.

The main substance being Oxygen, carried by a protein called hemoglobin, found inside red blood cells. White blood cells are also vital in their role of fighting disease and infection. Blood contains platelets which are essential for clotting the blood, which occurs following an injury to stop blood loss. Blood also carries waste products, such as Carbon Dioxide away from muscles and organs in order to be dispelled by the lungs.

Functions of the circulatory system

Figure 7
1.15.2 SYSTEMIC AND PULMONARY CIRCULATION

There are three circulatory processes occurring simultaneously within the body. Firstly systemic circulation carries blood around the body, pulmonary circulation carries blood to the lungs and coronary circulation provides the heart with its own supply of blood.

At the start of the blood circulatory cycle the heart pumps oxygenated blood out of the left ventricle, through the Aorta (the largest artery in the body). The aorta divides into smaller arteries, then arterioles and finally into microscopic capillaries, found deep within muscles and organs. Here the Oxygen (and other nutrients) passes through the thin capillary walls, into the tissues where it can be used to produce the energy muscles require to contract. A waste product of energy production (metabolism) is Carbon dioxide and in order to be removed, it too passes across the walls of the capillaries, into the blood stream. The blood continues back towards the heart, through venues and then veins, into the right atrium.

Once blood returns to the heart it is then pumped from the right ventricle through the Pulmonary arteries to the lungs, where the waste carbon dioxide can be expelled and more Oxygen collected. The Pulmonary vein carries oxygenated blood back to the left atrium of the heart, where the cycle starts again.

1.15.3 IMPORTANCE OF SYSTOLIC BLOOD PRESSURE

Systolic pressure is directly related with the cardiac function. Systolic is the pressure on the artery walls when the heart is beating. Systolic becomes more important when above age of 40. It becomes the main reason for the various heart disorders such as cardiac stroke, heart attack. Diastolic is important for anger ones as it indicates high blood pressure.

Systolic pressure measures the force blood exerts on the artery walls when the heart beats and diastolic pressure measures the force on the arteries between heartbeats. The importance of SBP as a predictor of cardiovascular risk has been demonstrated in a number of studies. This can be clearly seen in the classic meta-analysis of data from 61 prospective observational studies that involved almost
1,000,000 individuals with no vascular disease at baseline carried out. This analysis calculated the effect of a 20 mmHg difference in usual SBP on the risk of stroke and ischemic heart disease (IHD). The authors found that for individuals between the ages of 40 and 89 years, a usual SBP value that was lower by 20 mmHg was associated with significantly lower risk of death from stroke (hazard ratios, 0.36–0.67) and IHD (0.49–0.67) (Lewington et al 2007).

1.15.4 IMPORTANCE OF DIASTOLIC BLOOD PRESSURE

Diastolic is usually the pressure on the artery walls between the heart beat. Diastolic pressure is the indicator of peripheral resistance of the vessels, mostly the capillaries (resistance vessels). Another effect, wind vessel effect is associated, which actually means the recoiling force of the great vessels (aorta and likes) exerted immediately after a cardiac output. (Swami Shankardevananda 2008)

1.15.5 IMPORTANCE OF BODY MASS INDEX (BMI)

People, who are extremely muscular, such as athletes and bodybuilders, may register a high BMI even though they are exceptionally healthy. Increased muscularity makes weigh more than average for height, so the equation results appear as if BMI is too high. Doctor should be able to visually assess muscular condition and offer alternative methods for evaluating risk of disease, such as blood tests.

BMI can also miss people who have a high body fat percentage but a normal weight. If have 20 percent fat as a man or 30 percent fat as a woman, but BMI is in the normal range, are still at risk of many of the same ailments associated with obesity. Have a condition known as normal-weight obesity. Sedentary people and older adults are at particular risk for this condition that's estimated to affect 30 million Americans.

1.15.6 IMPORTANCE OF HIGH DENSITY LIPOPROTERIN (HDL)

This type of lipoprotein is often referred to as "good" cholesterol. HDL picks up excess cholesterol in blood and takes it back to liver where it's broken down and
removed from body. Cholesterol levels are an important measure of heart health. For HDL cholesterol, or "good" cholesterol, higher levels are better.

High-density lipoprotein (HDL) is known as the "good" cholesterol because it helps remove other forms of cholesterol from bloodstream. Higher levels of HDL cholesterol are associated with a lower risk of heart disease. Cholesterol is a waxy substance that's found in all of cells and has several useful functions, including helping to build body's cells. It's carried through bloodstream attached to proteins. These proteins are called lipoproteins. This type of lipoprotein is often referred to as "good" cholesterol. HDL picks up excess cholesterol in blood and takes it back to liver where it's broken down and removed from body.

1.15.7 IMPORTANCE OF LOW DENSITY LIPOPROTEIN (LDL)

Blood levels of LDL cholesterol (LDL-C) are often assessed when evaluating the risk of future heart disease. Cholesterol is a fat substance. Fats are insoluble in water and can therefore not be transported in blood on its own. The body’s solution to this problem is to bind cholesterol to certain proteins that function as transport vehicles carrying different types of fats such as cholesterol, triglycerides (TG) and phospholipids. These combinations of fats and protein are termed lipoproteins. Low-density lipoprotein (LDL) is one of the body’s lipoproteins and an important carrier of cholesterol.

The amount of cholesterol carried by different lipoproteins can provide valuable information about the risk of developing cardiovascular disease (CVD). LDL-C reflects the amount of cholesterol carried by LDL. LDL-C is an important marker for the risk of developing heart disease. Many studies have shown a strong and graded correlation between LDL-C and the risk of CVD, both in women and men. However, this association appears to become less prominent with increasing age, and some studies have suggested that low LDL-C may be associated with increased mortality in older adults.
1.15.8 IMPORTANCE OF TRIGLYCERIDES

The source of triglycerides, food is one source of triglycerides. Liver also makes them. When eat extra calories especially carbohydrates liver increases the production of triglycerides. When consume or body creates excess triglycerides, they’re stored in fat cells for later use. When they’re needed, body releases them as fatty acids, which fuel body movement, create heat and provide energy for body processes.

For good health, triglycerides level should be less than 150 mg/dl. Borderline high levels are 150 to 199 mg/dl. High is 200 to 499 mg/dl. Very high is 500 mg/dl and greater. If a high triglycerides level, healthcare provider may have talked with about taking steps to lower it. This is because some lipoproteins that are rich in triglycerides also contain cholesterol. This can lead to atherosclerosis in people with high triglycerides. A person with high triglycerides often has other risk factors for heart disease, such as age (men over 45 and women over 55), family history, a low HDL level, or diabetes. Very high levels of triglycerides are associated with inflammation of the pancreas. People who are overweight or obese often have higher than normal levels of triglycerides. All these conditions may increase risk for developing heart disease or of having a heart attack or stroke. Metabolic syndrome is the combination of high blood pressure, high blood sugar, and too much fat around the waist, low HDL (“good”) cholesterol, and high triglycerides. Metabolic syndrome increases risk for heart disease, diabetes, and stroke.

A blood test that measures cholesterol also measures triglycerides. For a general idea is about triglycerides level. Total blood (or serum) cholesterol total cholesterol score is calculated using the following equation: HDL + LDL + 20 percent of triglycerides level. Cholesterol is a lipid needed to form cell membranes, bile salts, adrenal corticosteroid hormones, and other hormones such as estrogen and the androgens. Cholesterol is obtained from the diet and also synthesized in the body, mainly by the liver and intestinal mucosa. Very low cholesterol values, as are sometimes seen in critically ill patients, can be as life-threatening as very high levels. According to the National Cholesterol Education Program, maintaining cholesterol levels less than 200 mg/dl significantly reduces the risk of coronary heart disease.
Normal is less than 150.
Borderline-high is 150 to 199.
High is 200 to 499.
Very high is 500 or higher.

Beyond the total cholesterol and high-density lipoprotein cholesterol (HDLC) values, other important risk factors must be considered. Many myocardial infarctions occur even in patients whose cholesterol levels are considered to be within acceptable limits or who are in a moderate-risk category. The combination of risk factors and lipid values helps identify individuals at risk so that appropriate interventions can be taken. If the cholesterol level is greater than 200 mg/dl, repeat testing after a 12- to 24-hr fast is recommended.

**Cholesterol level charts**

![Cholesterol level charts](image)

**Figure 8**

LDL+HDL+ (0.2 X Triglycerides) = Total cholesterol
1.15.9 IMPORTANCE OF ADJUSTMENT

Middle age is characterized by competence, maturity, responsibility and stability. Middle age is a phase of transition when life pattern are revised in several ways to adapt to the new lifestyle. People at this stage want to enjoy the success of job, satisfaction derived from the family and social life as well as look forward to the success of their children, aging parents, the use of leisure time and plan for old age. Middle age is also considered the time of transference of authority, freedom and decision taking power to younger generation. This is the phase when people face entirely new set of challenges, expectation and liabilities and make several compromises. There may be many other aspects of life where one has to adapt to the changes like parenthood crises, coping with the untimely death of the spouse, etc. The occurrences of physical changes lead to changes in behavior also.

Middle adulthood is difficult to define in generalities, since there are variations in attitudes and behaviors at this point. According to Collin’s Dictionary, Middle age is usually considered to occur approximately between the age of 40 and 65. While prominent social scientist, Erik Erikson, sees it ending a little later and defines middle adulthood as between 40 and 65. Middle adulthood begins with a transition (40-45), followed by a life structure (45-50). This structure is re-evaluated (50-55) and ends in a culminating life structure (55-60).

People have made consistent choices in certain directions and they often don't feel much freedom to significantly change their lives. Life crises often make the decision for them about change. People who feel cynical, disappointed, and angry about their lives tend to feel less optimistic, in this age. By this time the marriage has endured many shifts: from the more romantic, idealistic, and/or sexual emphasis, through the more prosaic, child-rearing, team-mate era. These previous sequences might have culminated in a relationship that is seasoned, stable and more satisfactory or more conflictual, tenuous and alienated than at any other time. In the absence of children, the conjugal bond, whatever its nature, will gain prominence.
It is important to adjust naturally with the transitions that occur both physically and mentally. There are challenges which should be met and coped with successfully. At this age it is good to look at the world with new prospective and changed interests. Some may find this adjustment stage really difficult and hard to cope with. Following are some of these important changes and adjustment which are faced in middle age.

### 1.15.10 IMPORTANCE OF LIFE SATISFACTION

Women's role in society is increasing in importance and so is the influence of women in making decisions within the home. As the life expectancy of women increases, managing their health is becoming an important issue in terms of overall national competitiveness.

Due to modern lifestyle trends that result in decreased physical activity, encouraging exercise is an important part of promoting the overall health of people. This is especially true for middle-aged and elderly women facing Hypertension. Exercise such as swimming, aerobics, and weight-lifting are recommended for middle-aged and elderly women. Recently health dance exercise has become popular because it is viewed as enjoyable form of exercise. Health dance is very enjoyable and can promote social interaction. Health dance is not physically demanding and is not only recommended for middle aged women but for elderly women as well.

### 1.16 CAUSES OF HYPERTENSION

Unknown causes (85%), premature birth, low birth weight, Kidney problems, Hormone problems, faulty genes, obesity, a high salt diet, smoking alcohol consumption, stress, excess fructose, high caffeine, high cholesterol levels, constipation, vitamin deficiency, negative thinking, age, urban living, family history, low potassium intake, vitamin D deficiency, physical inactivity, diabetes, noise pollution, arterial diseases, long work hours, laziness, weight loss, weight gain, irregular eating, loss of appetite, arthrosclerosis, low folic acid intake.
Age and family history can increase the risk of high blood pressure, but lifestyle is a huge factor too. A study in The Journal of the American Medical Association (JAMA) found that women with the healthiest lifestyles good diet, regular exercise, moderate (at most) alcohol consumption, no smoking had the lowest rates of high blood pressure. And while more is better when it comes to healthy habits, don’t have to change everything at once. A study in the journal Circulation found that among men taking blood pressure medication, those who adopted just one healthy habit had lower rates of heart disease than those who had no healthy habits.

Smoking, Alcohol
Being overweight or obese
Lack of physical activity
Too much salt in the diet
Too much alcohol consumption (more than 1 to 2 drinks per day)
Stress
Older age
Genetics
Family history of high blood pressure
Chronic kidney disease
Adrenal and thyroid disorders
Sleep apnea
High prevalence of diabetics, High cholesterol, unhealthy diet.
Low level secretion of Estrogen use of birth control pills, use of hormone pills and related problems.

1.17 SIGNS AND SYMPTOMS OF HYPERTENSION

Obesity
Kidney failure
Strokes
Loss of vision
Hardening of the arteries
Headache, heaviness and restlessness
Respiratory problems
Tiredness
Increased heart beat and heart attack
Chest pain
Irritation and anger
Nose bleeding
Nausea
Tiredness
Seating
Palpitation
Headache
Dizziness
Shortness of breath
Blurred vision
Jaw pain
Depression
Buzzing noises in the ears
Digestive disturbances
Insomnia
Bleeding from nose
Bleeding through piles
Bleeding from blood vessels
Poor blood circulation.

1.18 COMPLICATIONS OF HYPERTENSION

Stroke, heart failure, damage to kidneys, eye damage, liver problems, sleep apnea, nerve problems, brain hemorrhage, bulging of vessels in the chest, elevated sugar levels, constipation, anxiety. High blood pressure is dangerous because it makes the heart work too hard. It also makes the walls of the arteries hard. High blood pressure increases the risk of heart disease Adrenal gland, brain and nerves systems, heart failure, stroke, kidney disease and blindness.

1.18.1 HARDENING OF THE ARTERIES

Hardening of the arteries: As people get older, arteries throughout the body harden, especially those in the heart, brain and kidneys. High blood pressure is associated with these "stiffer" arteries. This, in turn, causes the heart and kidneys to work harder. The hardening of the arteries can lead to heart attack, stroke or other complications. The below figures shows Shrinkage of arteries and arteries damaged by fat cells.

![Figure 9](image1)

![Figure 10](image2)
1.18.2 STROKE

A stroke is said to have occurred when brain cells die because of a lack of oxygen. High blood pressure is the most important risk factor for stroke as it damages arteries making them more prone to breaking or clogging. May suffer a stroke if a blood vessel ruptures (breaks) in the brain or a blood clot blocks one of the narrowed arteries, cutting off blood supply to a part of the brain.

1.18.3 IMPAIRED VISION

High blood pressure can eventually cause blood vessels in the eye to burst or bleed. Vision may become blurred or otherwise impaired and can result in blindness.

1.18.4 KIDNEY DAMAGE

The kidneys act as filters to rid the body of waste. Over time, high blood pressure can narrow and thicken the blood vessels of the kidneys. The kidneys are able to filter less fluid, and waste builds up in the blood. Over time, the kidneys may fail altogether. When this happens, medical treatment (dialysis) or a kidney transplant may be needed.

1.18.5 HEART ATTACK

High blood pressure is a major risk factor for heart attack. The arteries bring oxygen-carrying blood to the heart muscle. High blood pressure causes the build-up of plaque in the arteries, narrowing and hardening them. If the heart cannot get enough oxygen-rich blood, chest pain, also known as "angina", can occur. If plaque or a blood clot in the arteries blocks the flow of blood to a part of the heart, a heart attack results.

1.18.6 CONGESTIVE HEART FAILURE

High blood pressure is the number one risk factor for congestive heart failure (CHF). Increased blood pressure causes the heart muscle to grow weaker over time.
CHF is a serious condition in which the heart is unable to pump enough blood to supply the body's needs.

### 1.19 CURING HYPERTENSION

Lower blood pressure with simple lifestyle changes to protect from this hidden health problem. According to research or other evidence, the following self-care steps may be helpful. Watch what eat choose a diet low in cholesterol and animal fat, and high in produce, whole grains, legumes, and low-fat dairy, with some nuts and seeds. Get more soy add 10 grams of soy protein or 16 ounces soy milk twice daily into diet to help lower blood pressure. Boost heart health with supplemental garlic 600 to 900 mg a day of a standardized garlic extract can improve heart and blood vessel health, and also has a mild blood pressure lowering effect. Try coq10 taking 100 mg a day of this powerful antioxidant may have a significant impact or blood pressure after one to several months. Sidestep salt avoid using too much table salt, limit salty fast foods, and read labels to find low-sodium foods (less than 140 mg per serving) in grocery store. Take minerals supplements of calcium (800 to 1,500 mg a day) and magnesium (350 to 500 mg a day) may be helpful. These recommendations are not comprehensive and are not intended to replace the advice of doctor or pharmacist. Continue reading for more in-depth, fully referenced information.

### 1.19.1 HIGH BLOOD PRESSURE: PRECAUTIONS AND PREVENTIONS

High BP is generally is known as lifestyle disorders. Therefore, it is essential to bring positive changes in lifestyle, way of thinking and dietary pattern. Adopt natural lifestyle instead of faulty one. Morning and evening walk along with sound sleeping at night is suggested. To a larger extent, sudden and unnatural changes in our daily lifestyle are responsible for high Blood Pressure (BP) or Hypertension. The rapid changes in the standard of living also triggered added disadvantages that lead to diseases like HBP, Obesity, and Heart diseases, Insomnia, Asthma and Diabetes.
1.19.2 IMPORTANT PRECAUTIONS AND PREVENTIVE MEASURES

Follow weight regime properly

Exercise regularly.
Strenuous exercise should be avoided but morning an evening walk is beneficial
Give more weight age to fruits and vegetables.
Keep away from smoking
Keep the hectic, stressful, anxiety and strain lifestyle in check.
Decrease salt and fat intake.
Incompatible and irregular food habits, excessive oil, spicy ghee, butter, pickles, papadum, aggravate the condition
Avoid alcohol, cigarettes, tobacco, excess tea, coffee, etc.
Blood pressure should be checked regularly.
One meal should be consisted of raw foods and the second one should be of cooked foods
Take meal slowly and in a relaxed atmosphere.
Late dinner should be avoided.
Walking is an excellent form of exercise for hypertension.
Bicycling, swimming and jogging are also good.
Patients are advised to take rest as and when required.
The intake of salt should be restricted. Baking powder should be avoided.
1.20 REMEDY FOR HYPERTENSION

Walking, Exercise, Hipbath, Spinal bath, Cold foot bath, Fasting once in a week, Massage, Sleep, Nutrition diet (important minerals to add daily - Potassium, Magnesium and calcium), Mud bath, Immersion bath, Chest pack, Chant “Yam” mantra, Magneto therapy, DASH diet, Sattvic diet and Yoga.

Avoid

Red meat, egg, curd, fried food: stem bath, hip bath, packaged foods, fat items, junk foods, smoking, alcohol, spicy foods, excess salt, excess sugar, white flour, pastas, pickles, chutneys, papadum, sated nuts, chips, tea, coffee, rich food, over eating, colas (soft drinks).

Sattvic Diet


Most preferred fruits: Orange, Guava, Grapes, Apple, Pomegranate, Pineapples.

Yoga

Yoga is a mind-body therapy based on movement. Over the last few years, research into the potential health benefits of yoga, especially regarding blood pressure, have unearthed some tantalizing results. Yoga is good for general health. Fast facts on yoga and blood pressure here are some key points about yoga and blood pressure. Gentle physical activity, Controlled, focused breathing to overcome women’s hypertension.
Yoga instructors use a variety of terms for various "poses" - often using words from the classical Indian language, Sanskrit. Yoga itself means "union" in Sanskrit. Yoga's popularity has risen in the West since the 20th century and is now studied for its potential benefits on human health. Here see that, the fat muscles shirked and the blood pathway getting blood flow will be more pressure. By all of these easily understand doing Yogic practices loosening practices increasing synovial fluids, Suryanamaskar to regulate all body part and balance the all hormones, Forward bend Asanas giving blood flow in the brain to work efficiency, Pranayama is eliminate more carbon dioxide and increased more oxygenated blood, Mudras balance the five Element and Bhudhas, and Japa and Relaxation lowering the heart beat and blood capillaries work more ninety percentage. (Swami Shankardevananda 2008).

1.21 YOGA

Yoga is one among the six systems of Indian philosophy. Maharishi Patanjali rightly called “The Father of Yoga” compiled and re fined various aspects of Yoga systematically in his “Yoga Sutras”. Patanjali advo cated the eight fold path of Yoga, popularly known as “Asthanga yoga” for all round de velopment of human personality. They are: - Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana and Samadhi. These components advocate certain restraints and observances, physical discipline, breathe regulations, restraining the sense organs, meditation and Samadhi. These steps are believed to have a potential for improvement of physical health by encouraging better circulation of oxygenated blood in the body, retraining the sense organs thereby inducing tranquility and serenity of mind.

The basic idea of yoga is to unite the atma or individual soul with the paramathma or the universal soul. According to yoga philosophy, by cleansing one’s mind and controlling one’s thought processes one can return to the primeval state, when the individual self was nothing but a part of the Divine self. This is the sense encapsulated the term Samadhi. The aim of the yogi is to build the Structure of yoga.
1.21.1 MEANING OF YOGA

In Sanskrit, the word ‘yoga’ is used to signify any form of connection. In a philosophical sense, however, yoga means the conscious connection of the limited little egoistic self with the unlimited, eternal, higher Self. Concepts and practices of Yoga originated in India several thousand years ago (more than 5000 years). Its founders were great Saints and Sages. The great Yogis gave ration interpretation to their experience of Yoga and brought about a practical and scientifically sound method within every one’s reach. Yoga today is no longer restricted to hermits, saints, and sages and it has taken its place in our everyday lives and has aroused a worldwide awakening and acceptance in the last few decisions. The sciences of Yogic techniques are reoriented to physiological, biological and modern lifestyle.

1.21.2 DEFINITIONS OF YOGA

Swami Sivananda : “Yoga is universal in its application leading to an all-round development of body, mind and soul”

Sri Sri Ravishankar : “Blossoming of human potential to fullness is yoga”

Gheranda Samihita : “There is no greater power than Yoga”

Yoga Shastra : Perception of truth is yoga

Yogi Ashwini : Yoga is a complete science of the being’s evolution
Yoga is the sum total of creation

Narendra Modi : Yoga gives us health assurance at zero budget

(R.Elangovan, 2016)

1.21.3 ORIGIN OF YOGA

“Yoga “the very word radiates peace and tranquility. This felling probable stems from the etymology of the word. The word Yoga is derived from the Sanskrit
word ‘Yuj’ which essentially means to join or unite. The union referred to is that of the individual self-unifying with cosmic consciousness or the Universal Spirit. Yoga is a means to achieving this goal

Born in India, almost 26,000 years ago, Yoga is believed to have evolved during the period of the ‘Sat Yuga’, also called the Golden age. This period became known as a time of everlasting peace and abundant blessings, filled with seekers of the Eternal Truth. That is why, probably, even today we associate yoga with sages hermits. It was not until the discovery of the Indus valley civilization, the largest civilization that knowledge about the origin of Yoga surfaced. Excavations give evidence of Yogi’s existence during this period: yogi like figures engraved on soapstone seals have been unearthed. In fact, it was the Aryans, migration from the north-west, who were instrumental in discovering yoga.

1.21.4 HISTORY OF YOGA

Yoga as we identify is it today is the product of a complex spiritual evolution has taken place over centuries, the exact history of yoga is uncertain. The earliest sings of yoga can be traced to Stone Age Shamanism, both Shamanism and yoga has cultural similarities. The shamanistic civilization revered the scared art of discern the cosmic order through inner vision: they used rituals to create shifts in their perceptual field to communicate with the spirit world. Shamans were the precursors of the yogis.

The development of yoga can be traced to over 5000 years ago, evidence of yoga postures were found on stone drawings dating from these times. Archaeological findings from the Indus Valley Civilization, revealed a portrait of a Yogi meditating in what looks like as Asana, it is known as the Pashupati seal. Yoga’s long rich history can be divided into five main periods: Vedic Yoga, Pre-Classical Yoga, Post – classical Yoga and modern Yoga.

1.21.4.1 VEDIC YOGA

Vedas are a compilation of hymns and rituals which contain a comprehensive key to cosmic evolution, the Sanskrit word Veda means “knowledge”. The Vedas
contains the oldest known Yogic teaching and is considered divine revelation. Teachings found in the Vedas are called Vedic yoga, this teaching revolves around the concept of reuniting the visible material world with the spiritual world transcending the limitations of the mind. During this time, the Vedic people relied on rishis (Vedic prophets) to teach them how to live in divine harmony, understanding the world.

Later, text known as the Brahmans were written as commentaries explaining the hymns of the Vedas. The Aranyakas are texts which details rituals for yogis living in the seclusion of the forest, most Brahmanas have one more aranyakas associated with them. The actual word “Yoga” was first mentioned in Rigveda. The Rigveda which dates back to approximately 1,500 before the Common Era is a collection of hymns describing the practice of meditation as a discipline.

1.21.4.2 PRE-CLASSICAL YOGA

The pre-classical Yoga period covers an extensive period of approximately 2,000 years: the creation of the Upanishads marks the beginning of this period, they are a huge work containing over 200 scriptures which describes the idea of karma, the cycle of birth and death, the moral causation from past actions and first mentioned the Koshas (one of five coverings of the soul), these explain three subjects: the ultimate reality (Brahman), the transcendental self (Atman) and the relationship between the two.

Around 500 B.C.E., the Bhagavad – gita was created: it is a beautiful story of a conversation between the God-man Krishna and the prince Arjuna. In the Bhagavad-Gita, three aspects must be brought mutually in our existence: bhakti (devotion), Jana (knowledge), and karma (cause and effect). The Gita then tried to unify the yogic traditions of Bhakti Yoga, Jana Yoga, and Karma Yoga searching the sacrifice of the ego through self-knowledge and it is because of this it has gained importance.

During this time, Yoga found its way into Buddhism too, the Buddha saw that the suffering is caused by desire, greed, and delusion, its Yoga stresses the importance of Meditation and ethics over physical posture. A revered figure named Vyasa,
categorized the Vedic hymns into the 4 Vedic texts: Rigveda (knowledge of praise), Yajur Veda (knowledge of sacrifice) Samaveda (knowledge of melodies), and Atharvaveda (knowledge of Atharvan). Atharvan was a legendary Rishi.

1.21.4.3 CLASSICAL YOGA

The classical yoga period is defined by the yoga sutra, composed by Patanjali. In Patanjali’s sutras: Yoga is presented in a standardized and approachable way. Patanjali has often been called the founder of Yoga because of this work. Patanjali believed that every individual is composed of Prakrti (matter) and Purusha (spirit) and that the goal of Yoga is to free the spirit from the material world. This is in severe dissimilarity to Pre-classical and Vedic Yoga, which signify the unification of the mater and the spirit.

The 195 Sutras (words of wisdom) that comprise the Yoga sutra expound the practice of yoga an eight-limbed path of self-transcendence, these are:

Yama- self –restraint or ethical conduct
Niyama- personal and religious observance of purity, devotion and study
Asana- physical activity
Pranayanma- breathe control or regulation
Prathyahara- abstraction of the sense
Dharana-concentration
Dhyana- meditation that leads to Samadhi
Samadhi- absorption in the sublime and blissful awareness

Patanjali’s concept was prevailing for some centuries that some Yogis focused entirely on meditation and ignored the practice of Asanas.
1.21.4.4 POST–CLASSICAL YOGA

Yogis of the past had not paid much attention to the physical body as they were focused on meditation and contemplation. A few centuries after Patanjali, yoga took a turn, the new generation of yoga masters beginning to probe the hidden powers of the human body, developing a system where different exercise, in conjunction with deep breathing meditation, would help to rejuvenate the physical body, prolong life and achieve enlightenment. The human body was regarded as the temple of the immortal soul.

The Post classical Yoga period gave a dramatic increase in yogic literature and brought big chance to Yoga, with the developing of Hata Yoga and other branches of yoga. During this time yoga flourished and nowadays is practice throughout the world. In contrast to classical yoga, post classical yoga is focused in the appreciation of the present moment and the affirmation of the unity of everything.

1.21.4.5 MODERN YOGA

Yoga arrived to the west during the late 1800’s. It can be attributed to many gurus, including Swami Vivekananda, a student of Ramakrishna who was commissioned to attend the 1893 Parliament of Religions in Chicago causing deep impression on the Americans. Other important Yoga gurus include Swami Sivananda, Swami Satchidananda, and Maharishi Mahesh Yogi who popularized Transcendental meditation in the 1960’s. Dalai Lama is a great yogi from Tibet: he was awarded the Nobel Prize for peace and has inspired many westerners to learn more about Buddhism and Yoga.

Yogi Swami Sivananda taught the five principle of yoga which are:

Proper relaxation(savasan)
Proper exercise(Asanas)
Proper breathing(pranayama)
Proper diet
Positive thinking and meditation.(dhyana)
Yoga now has several different schools or styles, all emphasizing the diverse aspects of the practice. Hata yoga practitioners learn to recognize reality and use physical resources in order to achieve self-development. Nowadays, yoga is the mainly diversified spiritual practice in the planet: it has gained enormously popularity throughout the last few years, and these days over 30 million people follow the yoga message of peace.

1.21.5 PATHS OF YOGA

Various types of Yoga benefits the human body and mind mentally, physically and spiritually. While the ultimate goal of yoga is to unify body, mind and soul, there are different ways to achieve this aim. These various ways constitute the different types of yoga. Yoga is broadly divided into eight types, namely, Bhakti yoga, Hata yoga, Jana yoga, Karma yoga, Kundalini yoga, Manta yoga, Bahiranga yoga and Swara yoga. Most of these kinds had been practiced in Indian since ages unknown. Certain factors, like origin, history, style, technique and significance, differentiate one branch of yoga from the other. Through the development of one’s body, mind ad psychic potencies, these ultimately lead to physical strength and further on to spiritual consciousness. Hence the final aim of all kinds of yoga is primarily the same: salvation. Most of the types of yoga also involve the usage of different poses or yoga asanas, meditation and breathing exercise or Pranayama.

The four paths of Yoga are Jnana Yoga, Bhakti Yoga, Karma Yoga, and Raja Yoga. These four paths of Yoga are aspects of a whole that is called Yoga. The four paths of Yoga work together, like fingers on a hand.

1.21.5.1 YOGA IS THE PRE-EXISTING UNION

Yoga means the realization in direct experience of the pre-existing union between the individual consciousness and the universal consciousness. There are different ways of expressing this, including that Atman is one with Brahman, Jivatman is one with Paramatman, or Shiva and Shakti are one and the same. Each of these ways of saying it comes from a different viewing point, while they are not
essentially different points of view. They all point in the same general direction of union or Yoga.

1.21.5.2 UNION OF BODY AND MIND

It has become common to say that this union is merely the union of the physical body and the mind. This allows both teachers and practitioners to dodge the true meaning of Yoga so as to present it as being something other than a spiritual path such as only physical health or fitness. It also allows people to avoid any sense of conflict with limited religious views that have no place for such high direct experience.

1.21.5.3 FOUR PATHS OF YOGA

There are four traditional schools of Yoga, and these are: Jnana Yoga, Bhakti Yoga, Karma Yoga, and Raja Yoga. While a Yogi or Yogini may focus exclusively on one of these approaches to Yoga that is quite uncommon. For the vast majority of practitioners of Yoga, a blending of the four traditional types of Yoga is most appropriate. One follows his or her own predisposition in balancing these different forms of Yoga.

1.21.5.4 GNANA YOGA

Gnana Yoga is the path of knowledge, wisdom, introspection and contemplation. It involves deep exploration of the nature our being by systematically exploring and setting aside false identities. While Gnana Yoga deals with knowledge, wisdom, introspection and contemplation, everybody has a mind and at some point will need to examine it, wherein quiet reflection naturally comes.

1.21.5.5 BHAKTI YOGA

Bhakti Yoga is the path of devotion, emotion, love, compassion, and service to God and others. All actions are done in the context of remembering the Divine. All
people will experience emotions such as love, compassion, and devotion at points along the journey, regardless of which of the four paths of Yoga is predominant.

1.21.5.6 KARMA YOGA

Karma Yoga is the path of action, service to others, mindfulness, and remembering the levels of our being while fulfilling our actions or karma in the world. Nobody can live in a body and the world without doing actions. Even a sage living in a Himalayan cave has to do some form of actions, and thus, some degree of Karma Yoga is essential.

1.21.5.7 RAJA YOGA

Raja Yoga is a comprehensive method that emphasizes meditation, while encompassing the whole of Yoga. It directly deals with the encountering and transcending thoughts of the mind. Everybody will become still and quite from sadhana or spiritual practices, will naturally encounter and deal with attractions and aversion, and will meditate, thus touching on Raja Yoga.

1.21.5.8 OTHER PATHS OF YOGA

Yoga is traditionally taught orally, rather than organized in books, which naturally are linear in nature, and are clustered into chapters. In oral teachings, there is a natural movement from one to another of the aspects of Yoga, including between the four paths of Yoga. Books and organization are useful, but we need to remember that Yoga is, in fact, a whole which has different aspects. For example, in the text Hatha Yoga Pradipika, Hatha Yoga (often called "physical yoga") is described as also related to Kundalini Yoga. It also explains that the purpose of Hatha Yoga is Raja Yoga. Thus, we can easily see the relationship of Hatha Yoga and Kundalini Yoga as being parts or aspects of Raja Yoga, which is one of the traditional four paths of Yoga.
1.21.5.9 INTEGRATION OF THE PATHS OF YOGA

It is popular these days for a teacher or institution to develop some approach to Yoga that "synthesizes" or "integrates" these four paths of Yoga (along with other component aspects of Yoga). However, that is misleading in that they were never really divided in the first place. It is not a matter of pasting together separate units. Rather, they are all a part of the whole which is called Yoga. Virtually all people have a predisposition towards one or the other, and will naturally want to emphasize those practices.

1.21.5.10 YOGA CLASSES

One thing that can lead to some confusion about the four paths of Yoga is the modern "yoga class" which often focuses mostly (if not completely) on physical postures. By referring to postures classes as "yoga classes" one is left with the false impression that this, unto itself, is the meaning of "Yoga." It is important to understand that asanas (postures) are a small, though surely useful, part of Yoga. It would be far better that such classes be called "postures classes" though that seems now unlikely to happen. In any case, the seeker of the authentic goals of Yoga will need to discern amongst usages of the word "Yoga" so as to follow the four paths of Yoga.

1.21.5.11 CHOOSING A PATH

Although the four paths of Yoga work together, along with the companion aspects of Yoga, it is extremely useful to be mindful of which of the four paths of Yoga is most in alignment with own predispositions. By identifying that path, it can be emphasized in life, and the others can be wisely, lovingly used to enhance the chosen path of Yoga.

This site is devoted to presenting the ancient Self-Realization path of the Tradition of the Himalayan masters in simple, understandable and beneficial ways, while not compromising quality or depth. The goal of our sadhana or practices is the highest Joy that comes from the Realization in direct experience of the center of
consciousness, the Self, the Atman or Purusha, which is one and the same with the Absolute Reality. This Self-Realization comes through Yoga meditation of the Yoga Sutras, the contemplative insight of Advaita Vedanta, and the intense devotion of Samaya Sri Vidya Tantra, the three of which complement one another like fingers on a hand. We employ the classical approaches of Raja, Gnana, Karma, and Bhakti Yoga, as well as Hatha, Kriya, Kundalini, Laya, Mantra, Nada, Siddha, and Tantra Yoga. Meditation, contemplation, mantra and prayer finally converge into a unified force directed towards the final stage, piercing the pearl of wisdom called bindu, leading to the absolute.

The yoga tradition offers a paradigm for such deep self-examination: the purusharthas, or four aims of life. They are dharma (duty, ethics), artha (prosperity, wealth), Kama (pleasure, sensual gratification), and moksha (the pursuit of liberation). The purusharthas are the blueprint for human fulfilment, signposts that point us to a successful, satisfying, balanced existence in the world. Working with them can help create a satisfying balanced life at the deepest and most holistic level. "All have a desire for a meaningful life. The purusharthas are the means that can help us achieve it," says ParaYoga founder Rod Stryker, who wrote a book about the purusharthas that's called The Four Desires. "They are, in a larger sense, what practice is really all about," he says, adding that the purusharthas offer a yogic perspective on how to engage skilfully in the world.

1.21.6 YOGA PHILOSOPHY

The patanjali Yoga philosophy which is one of the six systems constituting Vedic philosophy is also known as Astanga Yoga (the yoga of eight part or limbs) and is closely related to Sankhya and vedantic philosophy. Ashtanga yoga is the practical manifestation of both these philosophies. This practical system attempts to understand the nature of the elusive element we know as 'mind' its different state of being impediments to growth, afflictions and the methods of harnessing it for the achievement of absolute self-realization.
While Sankhya philosophy assigns three functions to the mental body-mind (mana), intelligence (buddhi), and false knowledge (mithya jnana) Vedanta adds a fourth element to this chitta or conditioned consciousness. But ancient yoga teachers collapse the category of the mental body with the mind and assigns intelligence and false ego as aspects of that mind with the chitta denoting the various states of the mana or mind. Yoga likens mana and chitta with a lake which is essentially calm and peaceful but whose basic tranquillity is obscured by various insubstantial surface waves. According to the philosophy, there are only two ways of disturbing this serenity and engendering patterns of thought—though sense perceptions (pramana) and when our memory (smriti) gets triggered off.

All other sources of mental activity lead to false knowledge. To quote the most venerable among yoga teacher, sage Patanjali, who said in his Yoga Sutra: When the persons possessing a body mistake by their erring intellect, this very body for the soul (atman), this king of bondage is wrought by ignorance (avidya): its annihilation is emancipation (moksha)."

The central doctrine of Yoga philosophy is that nothing exists beyond the mind and its consciousness, which is the only ultimate reality. The objective of this philosophy is to uproot misconceptions about the existence of external ‘realities’ from the minds of men. It believes that it is possible to reach this stage of self-realization through regular practice of certain yogic meditative processes that bring a complete withdrawal or detachment from all false sources of knowledge and inculcates an inner sense of balanced calm and tranquillity.

1.21.7 CHARACTERISTICS OF YOGIC LIFE

Yoga is union with the lord. It is a spiritual science that teaches the method of joining the individual soul with God by regular practice of Yoga. The conjunction of individual and supreme soul is called Yoga. The aim of yoga is to free man from the thralldom of matter and the fetters of Prakriti and make them realize absolute independent nature. The practice of Yoga will help to control the emotions and passions and will give power to resist temptations and to remove the disturbing
element from the mind. There are good numbers of persons, who from eight in the morning to eight at night are good business men. From eight to ten at night they are good yogis. They perform some Asanas, some Kriyas a little Pranayama, study some books on Hatha yoga and kundalini yoga and interpret yoga in their own manner. Be in the world but be out of the world. This is the highest yoga. Eat sparingly. Eat simple food. Observe Brahmacharya. Control the senses. Breathe pure air. Live in a quiet place with high spiritual vibrations under a Guru. Then practices yoga only then will attain success in Yoga.

1.21.8 ETHICAL LIFE AND YOGA

Right conduct, self-conquest, compassion, benevolence, and pursuit of truth, service of humanity, meditation and self-enquiry: this is good living this is divine life. Happiness is only within and fixes the gaze on the divine flame within, which is the essence of the Universal light, which only shines and spreads peace. Find more time for meditation, for sitting alone and seeking and gazing of the flame within. Every death is a reminder. Every bell that rings say “the end is near” everyday robs off from one part of precious life. Therefore should be very earnest in plunging self. When the mind is still, when the senses are quiet, when the intellect ceases functioning, enter the silence, wherein the dwells the unfathomable peace of the Eternal. By controlling the surging emotions, by subduing the tossing of likes and dislikes, love and hate, pleasure and pain, elation and depression, peace can be realized.

Ethical discipline is incumbent for success in yoga. Ethical discipline is the practice of right conduct in the life. The two moral pivots of yoga are Yama and Niyama, which the aspirant must practice in daily life. These correspond broadly to the ten commandments of the Bible or to the noble eightfold path of Lord Buddha. Non-injuring (Ahima), truthfulness (Satya), continence (Aparigraha), is the component parts of Yama. Internal and external purification (Saucha), contentment (Santosha), austerity (Tapas), study of religious and philosophical books (Svadhyaya) and self-surrender to the Lord (Isvarapranidhana) come under Niyama. Practice of Yama and Niyama will eradicate all the impurities of the mind. In fact, Yama and Niyama form the corner stones of Yoga philosophy.
Pre-eminence is given to abstention from injuring any living creature (Ashimsa) amongst all other virtues. There must be non-injuring in thought, word and deed. Non-injuring is placed first because it is the source of the following nine. The practice of universal love or brotherhood is nothing but the practice of non-injuring. Who practices non-injuring, will get quick success in Yoga. The practitioner must abandon even harsh words and unkind looks. And show goodwill and friendliness to one and all. Truthfulness (Satya) comes next in order. Thought must agree with word, and word, with action. This is truthfulness. These virtues are attainable only by the unselfish. Truth can hardly arise unless there is pure motive behind all actions. The word of Yogi is to bless others. (Sadhana)

1.21.9 ASTANGA YOGA

Patanjali systematized the various yogic practices and traditions of his times by encapsulating them in the form of aphorisms in his Yoga Sutra. In this momentous work, he describes the aim of yoga as knowledge of the self and outline the eight step or methods of achieving it. These are:

Yama or eternal vows
Niyamas or observances
Yogasanas or yoga postures
Pranayama or breath control exercises
Pratyaha or withdrawal of the sense from distractions of the outside world
Dharana or concentration on an object, place or subject
Dhyana or the continuance of this concentration, meditation and
Samadhi or the ultimate stage of yoga meditation.

1.21.10 THERAPEUTICAL YOGA

Yoga is a psychological, physiological and spiritual discipline that has been an integral part of Indian culture for centuries. Yoga is a complete science of life that
originated about thousands of years ago in India and still been practiced in India for centuries.

1.21.10.1 PROCESS OF YOGA

Yoga is a process or system that maintains not only the health but also generates a sense of happiness and fulfillment. It also encourages personal growth and development. Yoga brings the mind and body into a mutual state of well-being, balance ease and vibrant alertness.

1.21.10.2 POSITIVE APPROACH TO HEALTH

The health of the human being is influenced by various factors. Yoga is one of the systems that include all these factors. These factors are regular exercise in the form of physical posture, breathing, sufficient rest and relaxation, meditation, positive thinking and balanced diet. Thus yoga is an important, natural, preventive measure to ensure good health.

1.21.10.3 SELF THERAPY

Yoga is self-therapy. It is a self-therapy in the sense that one can perform this discipline on his own. Yoga involves different breathing techniques and postures which are known as Asana or postures, proper Breathing, Relaxation and meditation are an important part of yoga.

1.21.11 PRINCIPLES OF YOGA

1.21.11.1 HEALTH

Proper exercise to stimulate circulation
Proper breathing yogic practices to absorb more oxygen
Proper relaxation of the body and mind
Proper thinking and concentration of the mind
Proper natural wholesome food
1.21.11.2 OBSTACLES OF YOGA

The above modification are primarily, caused by the nine impediments to a healthy growth and development of the mind. These are:

- Sickness
- Incompetence
- Doubt
- Delusion
- Fatigue
- Overindulgence
- Confusion
- Lack of perseverance
- Regression

These nine conditions are the greatest causes of all sorrows, miseries and pain, which disturb the mind and result in distractions and loss of mental tranquility. All these interruptions produce symptoms such as, mental discomfort, negative thinking, the inability to be at ease in different body postures, and difficulty in controlling one’s breath. The yoga of patanjali prescribes abhyaya or regular practice and vairagya kaivalya (absoluteness) or self-realization. Abhyasa in this case is basically the correct effort required to move toward, reach, and maintain the state of yoga.

1.21.11.3 AIMS OF YOGIC LIFE

The purusharthas are elaborated upon extensively in the Mahabharata, the epic Indian poem that contains The Bhagavad Gita, and are interwoven with yogic philosophy at the deepest levels. But they have their roots in the Rig Veda, the most ancient and revered of Hindu scriptures. The Rig Veda suggests is that the purusharthas are the inherent values of the universe, explains Douglas Brooks, a Tantric scholar and professor of religious studies at the University of Rochester. The
cosmos is considered a living being, and the issues of law, prosperity, desire, and freedom belong to it. These are not just human concerns or psychological concepts. When we engage them as human beings, we are aligning the microcosm with the macrocosm. The cosmos is all laid out for: job is to get with the program.

To fully grasp the purusharthas, Stryker says, it pays to parse the meaning of the word itself. Purusha means, roughly, "soul" the essential Self that is unchanging, that isn't born and doesn't die, but belongs to the universe. Artha means "the ability" or "for the purpose of." Taken together, Stryker explains, purushartha means "for the purpose of the soul," and the very concept asks that take the broadest view of life. Are managing the day-to-day in such a way as to support inner work? Each one of the purusharthas has many scriptures dedicated to it (the Kama Sutra, the Dharma Shastras, and the Artha Shastras, among others). To truly understand all four would require a lifetime of study. Still, learning the fundamentals is useful, especially to the contemporary practitioner who's simply looking to find more joy and meaning in life. Here, provide a guide for working with the four aims: dharma, artha, Kama and moksha. Once have an understanding of the individual components of each of the purusharthas, can assess the role they play in life by contemplating the questions related to each one can then begin to analyse how well balanced they are in life.

1.21.12 TUNING YOGIC LIFE

The four aims are the pillars of a fulfilling life. In the following self-inquiry practice, about getting whole life in order at once do the exercise each week: become more in tune, more present with the Yoga. (Hema 2003)

Yogis are spiritual practitioners who practices of Yoga. In the west most people think of Yoga as simply being a set of physical exercise. The physical discipline is called Hata Yoga and is the external most part of the philosophy. Yoga means union of the individual self with the Universal Self. It is a feeling of oneness and unity with all creation. It has several distinct paths like Jnana Yoga (path of knowledge), Bhakti Yoga (path of devotion), and Karma Yoga (path of selfless service). Just as the astronomer using a high-powered telescope can see physical
objects millions of miles away in space, the Yogis sitting in a Himalayan cave using their intuitive powers can see subtle realities, which are beyond the comprehension of the ordinary mind. Entire universe has been created out of Love and is sustained by Love. Universe is uni (one) + verse (song). The universe is a song of divine love and each individual is a note in this harmony. The Yegis has experienced that every atom they body depends on the power of Love for its existence. And for the Yegis his body is not limited to the physical frame we inhabit for brief span of time. They understood that the body is not different from the cosmic body that contains all of creation.

1.21.13 BENEFITS OF YOGA

Brings down stress and enhances powers of relaxation
Boosts physical strength, stamina and flexibility
Bestows greater powers of concentration and self-control
Inculcates impulse control
Helps in rehabilitation of old and new injuries
Intensifies tolerance to pain and enhancing mental clarity
Boosts functioning of the immune system
Enhances posture and muscle tone
Improves blood circulation
Results in healthy, glowing skin
Cleanses and improves overall organ functioning
Bestows peace of mind and a more positive outlook to life
Infuses a sense of balance and internal harmony

Best of all, yoga is highly therapeutic. Some of the ailments proven to be relieved reversed and even healed through the practice of Yoga are acidity, allergies, Alzheimer disease, anaemia, anger, anxiety, arthritis, asthma, back pain, bronchitis, and cancer, hypertension. (Elangovan R, 2016)
1.22 DIET

When diet is wrong, medicine is of no use. When diet is correct, medicine is not required. The only way to keep health is to eat what don’t want: drink what don’t like, and do what’d rather not. **(Arvind Jauhar 2004)**

Diet actually includes everything that person eats be it more or less, good or bad. Diet means food, and it has a very important role in man’s struggle against disease and debility. It is well known that balanced diet is necessary to maintain good health: at the same time, one should also realise the importance of proper diet when the body is diseased. An appropriate diet would help the diseased body to move the faster on the road to recovery. For every kind of disease or physiological disorder, the regular diet is modified to form a special therapeutic diet, which reduces the burden on the disease organ and relieves the symptoms and other manifestations of the disease.

Therapeutic diets have an important role in modern medicine. Many patients do not get adequate advice and instructions, and as a result, they may fail to derive full benefit from the other forms of treatment. Doctors seldom prescribe full dietary instructions. For example, a patient with ulcers or typhoid would be prescribed a ‘bland diet’. Since it is left to the patient to go into the details of the diet himself, he would just being incomplete, the symptoms would not be totally relived, resulting in relapses.

In the same case, a dietician would explain to the patient in detail about the thermally, mechanically and chemically bland food. Such a dietary instruction would help cure the ulcers or typhoid quickly and automatically relieve the symptoms. Almost every disease is related to diet. Some diseases are caused by improper diets, and some require modifications in the diet as a part of their treatment. Under-eating or under nutrition leads to deficiencies of various nutrients, anaemia is being the most common of such deficiency disorders. Losses of hair and skin problems are also related to the deficiency of certain vitamins in the diet. Obviously, to rectify these problems one has to rectify the diet.
People are under the wrong impression that health depends on the quantity of food eaten. Over 100 calories extra per day, that is. One banana of a fistful of peanuts or a plate of idly, would result in $\frac{1}{2}$ kg gain in body weight over a period of 4-5 weeks. This would mean an increase of 5-6 kg in body weight in a year! Obesity brings with itself a number of other complications like heat disease, joint pains, respiratory problems, to name a few. In order to combat all these problems, a diet is required a reducing diet in this case. Physiological problems include fevers of typhoid and tuberculosis etc. Liver and kidney disorders and other problems associated with our body systems, also require diet modifications. The modifications are made so that the impaired organs of the body are given rest, and so the medication is more effective. Dietary changes are needed in periods of physiological stress like pregnancy and lactation (breastfeeding the baby). Dietary requirements also change as we grow up. They are different for babies, children, teenagers, adults above forty years of age and very old people. In order to feel comfortable and active or energetic throughout carried out in the diet. So we see that diet is an integral part of one’s life. After all, “a man is what he eats”. (Sri Swami Sivananda)

Yoga is defined as union between the limited self (jiva) and cosmic self (atman). Without trying to confuse things any further, we would like to point out that there is an anomaly in this definition. For there to be an aim or goal of union there must first be a state of separation. And in fact this separation does not exist. At this very moment are united with the cosmic consciousness. So the aim of yoga is not really to unite with greater self, to make know and tune in with existing inner nature. Citizens have more guns and countries have more bombs than ever before to defend themselves but still they don’t enjoy peace. It is because does not come from prescription drugs or bombs. (Swami Satyananda Saraswati 1981).

In a wealthy country like the United States the percentage of people suffering from psychological problems is incredibly high. Not only adult’s children are suffering from mental problems. In fact drugs are being heavily promoted by pharmaceutical companies to control the minds of children for afflictions like attention hyperactivity disorder. Drugs may have validity in some acute cases, but more often than not, simply suppress the symptoms without treating root cause of the
disease. More than anything else the food eat affects the mind. By eating the right food can become peaceful and happy. Enough of live way there will be everlasting peace and harmony on earth. The physical world that sees is a projection of minds. Whatever manifests on the physical plane originates in the subtler mental plane. As a simple example a large skyscraper, the beginning of that building was just an abstract thought in someone’s mind. Similarly people are known to have attacks (physical event) after feeling lot of stress (mental event). There is no point in telling everyone to become peaceful when mind is turbulent.

1.22.1 TYPES OF DIET

Sattvic diet (Pure diet)

Rajasic diet (Stimulating diet)

Tamasic diet (Impure diet)

1.22.1.1 SATTVIC DIET (Pure Diet)

Sattvic food is lower blood pressure. Discuss what sattvic food is. Sattvic food is food that helps to calm the mind and relax the body. It is consumed by yogis and those interested in having a calm mind to practice meditation. Sattvic food includes fruits, vegetables, nuts, seeds, grains, herbs and dairy products. Notice that sattvic food does not include hot spices like chilies. It does not include meat products or processed foods. It includes the above which is freshly cooked and consumed right away and not the foods that are kept overnight. Sattvic food combined with a little bit of yoga practice can do wonders in reducing hypertension.

Basically foods are divided into three categories- Peaceful (Sattvic), Anxious (Rajasic), Lazy (Tamasic) and Rajasic (Anxious) foods over stimulate the mind making it akin to riding a wild horse that is out of control. Lazy (Tamasic) foods make tired and dull the intellect. Sattvic (Peaceful) foods promote a tranquil state of mind and gives good physical and mental health. (Arvind jauhar)
Sattvic diet stated that “Praninam Punarmoolmaadha ram” – the route of all beings is nothing but food itself. Sattvic diet is pure food consists of grains, pulses, nuts, seeds, fruits, vegetables and dairy products.

Yogic practices and sattvic diet dilate the blood vessels thus reducing pressure: removes excess water and salt from the body.

Set right sympathetic nervous system to overcome stress: give massaging effect on the arteries.

Restore elasticity of the nerves, bio-rhythm of the body.

Balance the endocrine system.

Thus yoga and Sattvic diet are the prime remedies to overcome High blood pressure. Pure diet is the best foods for the mind.

Fresh juice, Fresh vegetables, Dairy products, Beans, Lentils, Legumes, Raw nuts, Honey, Water, Organic foods, Grains, Cereals, Sprouts, Freshly cooked, Rice, Ragi, Raw sugar, Pure diet promote these feelings.

Compassion, Tranquillity, Peace, Happiness, Calmness, Joy, Generosity, Open mindedness, Contentment, Balance, Holiness, Clear vision, Seeing world as one family, Inner beauty, Equal mindedness, Fairness, Expansion of heart, Effulgence, Selfless love, Indescribablebless. Diet is overwhelmingly peaceful then mind will be very peaceful. If diet is anxious elements in it will ride the emotional rollercoaster alternating between anger, anxiety, fear, restlessness, depression and excitement. If eat lazy foods will experience inertia, and dullness of intellect. Nowadays so many people take tranquilizers and other mood-altering drugs for depression and anxiety. If to eating peaceful foods would have a tranquil mind naturally and no need to take these medicines.
1.22.1.2 RAJASIC DIET (Stimulating food)

Stimulating diet include

All meat (beef, lamb, pork, etc.), All poultry (chicken, turkey, etc.), All seafood (fish, lobster, shrimp, oysters etc.), Eggs, Onions, Garlic, Alcohol, Tobacco, Drug, Caffeine, Chillies, Strong spices, Excess of dairy products, Tamarind, and Foods grown with chemical fertilizers. Stimulate foods promote the following feelings

Mood swings, Restlessness, Egoism, Anger, Violence, Anxiety, Sadness, Dissatisfaction, Unhappiness, Judgmental, Ambition, Machiavellian behaviour, Conspiratorial, Cunning, Lies, Contraction of heart and Selfishness.

1.22.1.3 TAMASIC DIET (Impure diet)

Impure diet includes the following types such as Canned, Frozen, Leftovers, Reheated, Stale, Unripe, over rip, Rotten, All meat (beef, pork, lamb etc), all poultry (chicken, turkey, etc.) and Garlic.

When impure diet is consumed following are the effect: Inertia, Sadness, Foolishness, No initiative, Clouding of vision, Stubbornness, Meanness, Tiredness, Low energy, Insensitivity to other feelings, No direction, Introduction of harmful poisons in the body, Obscuring the truth, Idiocy, Distorted world view, Narrow vision.

1.22.2 PRINCIPLES OF DIET

Prevention is better than cure.

Use food as medicine

Children aged below 11 years and persons aged above 55 years mainly are advised to take Sattvic diet.

Lord Krishna says “Yoga is not for him who eat too much”.
“Take pleasant whole-some and half-stomach full, fill a quarter stomach with water and allow the remaining quarter stomach empty” - Vishnu Purana.

Water and air also supply energy to the body considerably.

Medicines are curative whereas light eating is preventive.

Be present at the moment of eating.

Close the eyes and enjoy eating.

Eat when angry, if there is hunger, food can be digested well eat help food and eat within limits.

Donot take if don’t like.

After taking food lie down, turn left side and take rest for a while.

Eat slowly.

Change of food habits should be slow and gradual: nature never moves by leaps.

Eat to live and not live to eat.

Avoid eating when tired.

Avoid eating when angry.

Diet and disposition are very closely related. Control the tongue first and then all the other senses can be easily controlled.

Be in Vajrasana for 10 minutes after taking food if food is to be digested fast.

Should not become a salve to this food or that food.

Avoid heavy work immediately after taking food.

Take food when Pingala nadi works.

One who eats thrice a day – Rogi, ones who eats twice a day - Bhogi one who eats once a day – Yogi

Sattvic or ideal only will help to attain the goal of life.

If there is a will, there is a way and those who persist will leap the reward.
Drink food and eat water.

Give thanks, for food.

1.22.3 DEMERITS OF TAMASIC DIET

World peace will come when mankind switches it diet to eating predominantly peaceful foods. Eating Tamasic Diet foods is bad for on many different levels including moral (taking innocent life), karmic (punishment for taking innocent life,) psychological (for mind), physiological (for body) and ecological (harmful to environment).

Mind have become so programmed to eat Tamasic Diet foods and to accept it as normal that do not question the ethical and moral correctness of this practice. From a moral viewpoint the killing of any living creature is totally indefensible and absolutely repugnant. Most human beings live for less than a 100 years, which is infinitesimal in terms of the life of planet earth, which spans millions of years. Human form is not a permanent resident of earth but more akin to a visitor with a temporary visa. Human body is just a guest on this planet for a short moment of time.

But most people don’t feel like they are guests. They have like they are owners. They feel that own land, animals and even other people. This means have no right kill another creature whether it is and animal, bird or fish just for eating. Every animal is also a guest on this plant just like human. Also the rooms are extremely filthy and totally unhygienic. Next they are forced fed horrible food and given hormones and chemicals so that they put on weight very rapidly in a very unnatural manner. This is because animals are sold by the farmer makes. There are even reports of animals is the more money the farmer makes. There are even reports of animals being fed concrete to add on weight. To save costs some larger animals are fed their own freeze-dried unsterilized faeces. In Europe vegetarian animals like cows were being fed the remains of other cows. This has led to animals getting mad cow disease and foot and mouth disease. Animals are not as stupid think they are and they can sense that they are in the equivalent of death row awaiting their execution. The air in
the slaughterhouses is saturated with extreme fear. Each and every living creature
own life is precious to itself and no one wants to be killed.

1.22.4 BENEFITS OF SATTVIC DIET

According to Bahavad Gita “sattvic diet promotes life, virtue, strength, health,
happiness, purification of inner being and satisfaction”.

The antioxidants in sattvic food mop up free radical (the dangerous
chemicals), blamed for a host of ills including ageing.

Sattvic foods have polyunsaturated fatty acids which give desirable cholesterol
level. They have more flavones, the health giving chemicals.

They have high in calcium, potassium, magnesium and vitamin C which
regulates blood pressure.

They reduce the oxidative stress of strenuous physical work.

Nitrogenous takes place to produce new cells.

They raise our basal metabolic rate (BMR).

They contain high alkaline properties needed for immediate refreshing effects.

They contain a low caloric content, help to maintains ideal weight.

They have high fibre content.

Toxic changes don’t take place.

They boost immune system and increase the flexibility needed for bones.

They have fibre iron and B6 needed for a flat stomach.

They have Methionine, needed for lustrous hair.

They have antifungal and antiviral properties that are useful for the body.

They have antioxidants, burn the stubborn fat in our bodies.

They act as anti-ageing agents.
Sattvic diet is associated with a slower rate of cognitive decline as it has ant-amyloid agents.

Sattvic diet has phyto-chemicals which prevents blood clots.

Sattvic diet contains superoxide dismutase enzymes that could relieve stress.

Sattvic diet has hesperidins, the natural chemical the increase protective powers.

Lowers essential fatty acids like Docosahexaemoic (DHA) and Eicosapentaenoic (EHA) lead mental and physical health.

Sattvic diet is a mood enhancer producing the natural chemicals such as serotonin and melatonin.

Lycopene the natural pigment in sattvic diet increase skin protection.

They provide ligands (special molecules) that ‘turn on’ disease fighting genes and ‘turn off’ those that cause disease.

Sattvic diet gives more disease resistance and prolongs life.

Sattvic diet gives the power to work for long periods without tiredness.

Tamasic will vanish and rajas will merge in the satva.

Spiritually and mentally advanced people prefer the sattvic food. Average worldly people prefer the Rajasic food and undeveloped man prefers the tamasic food.

Medical studies have shown that sattvic food takers have two to three times more stamina that the Rajasic and tamasic food takers.

Sattvic diet helps us transcend body consciousness (Elangovan R, 2016)

1.23 YOGA AND DIET FOR WOMEN

Many women skip post-exercise nutrition because they don’t want to ‘undo the calories they just burned,’” says Amanda Carlson-Phillips, vice president of nutrition and research for Athletes’ Performance and Core Performance. “But getting a combination of 10 to 15 grams of protein and 20 to 30 grams of carbohydrates within
30 minutes of workout will help to refuel body, promote muscle recovery, amp up energy, and build a leaner physique.”

Yoga is a science, that is, it is a body of techniques that lead us to consciously connect with ourselves and with life, the experience of yoga. As yoga is a science, there is no dogma or belief system attached to it. Yoga simply tells us to do a certain practice and then to feel the effect of that practice, e.g. if we breathe slowly in a relaxed manner we will slow our heart rate; if we focus the mind we will develop mental peace and deep insight.

Various asanas and pranayama it is help sure that getting the physical, mental, psychological and spiritual well-being. The practice has significant impact on all the plains. The list of diseases is growing on physical and psychological levels both dealing with each independently will take a lot of effort however by the help of yoga one can at least make body and mind strong for middle aged women. Yoga is a way of life. It is predominantly concerned with maintaining a state of equanimity at all costs. All yoga schools of thought emphasize the important of the mind remaining calm, because or yoga philosophy also happens to be a valid discipline of Indian metaphysics. It is the result of human wisdom and insight on physiology, psychology, and ethics and spiritually collected together and practiced over thousands of years for the well-being of humanity. (JoshiK, 2001)

1.24 NEED OF THE STUDY

High blood pressure symptoms were bothering some of the women, the High blood pressure is known as the "silent killer," as it often has no symptoms. And now, new research suggests that women with high blood pressure are at higher risk than their male counterparts of vascular disease, prompting researchers to recommend different treatments in women. They also observed physiologic differences in the cardiovascular systems of the women, which included levels and types of hormones involved in regulating blood pressure. These factors can affect the severity and frequency of heart disease. The condition may need to be treated earlier and more aggressively than in men. If a person has high blood pressure it means that the walls
of the arteries are receiving too much pressure repeatedly the pressure needs to be chronically elevated for a diagnosis of hypertension to be confirmed. In medicine chronic means for a sustained period persistent. So the researcher has chosen the topic and the variables which would help the society to better understand the benefits of yogic practices with and without sattvic diet to motivate the women to improve the quality of life.

1.25 OBJECTIVES OF THE STUDY

To find out whether there would be any significant difference on selected physiological variables due to yogic practices with and without sattvic diet among hypertensive middle aged woman.

To find out whether there would be any significant difference on selected biochemical variables due to yogic practices with and without sattvic diet among hypertensive middle aged woman.

To find out whether there would be any significant difference on selected psychological variables due to yogic practices with and without sattvic diet among hypertensive middle aged woman.

1.26 STATEMENT OF THE PROBLEM

The purpose of the study was to find out the effect of yogic practices with and without sattvic diet on selected risk factors among Hypertensive middle aged women.

1.27 HYPOTHESES

It was hypothesized that there would be significant differences on selected risk factors among Hypertensive middle aged women due to yogic practices with and without sattvic diet groups than the control group.

It was hypothesized that there would be significant differences on selected risk factors between yogic practices with sattvic diet group and yogic practices without sattvic diet group among Hypertensive middle aged women.
1.28 SIGNIFICANCE OF THE STUDY

The study is significant in the following ways:

The significance of this study is to improve the knowledge and to provide a systematic approach to yogic practices with sattvic diet which 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.

The study may be helpful to the future research scholars to select new problems related to the Hypertensive middle aged women.

The study may give an idea of physiological status of the Hypertensive middle aged women.

The study may give an idea biochemical status of the Hypertensive middle aged women.

The study may give an idea psychological status of the Hypertensive middle aged women.

The study would help the yoga therapist working in hospital and rehabilitation center to assess the present standing of Hypertensive middle aged women.

The study would further motivate the further research on the related variables.

1.29 DELIMITATIONS

The study was confined to sedentary Hypertensive middle aged women only.

The study was delimited to the age group of the subject was ranged from 45 to 55 years only.

The study was delimited to Chennai city only.
The independent variables were Yogic practices with and without sattvic diet only.

The dependent variables were Physiological such as BP (Systolic), BP (Diastolic) and BMI (body mass index), Biochemical variables such as HDL (high - density lipoprotein), LDL (low – density lipoprotein) and Triglycerides and Psychological variables such as Adjustment and Life satisfaction only.

1.30 LIMITATIONS

Social –economic status of the subjects would not be considered.

Medication would not be taken into account.

Contains factors like life style, body structure, medication and family heredity would not be taken into consideration for the study.

A theoretical instruction for sattvic diet was only given thought out the experimentation.

Personal observations of the subject’s diet instruction were considered as limitations.

1.31 MEANING AND DEFINITION OF THE TERMS

1.31.1 YOGA

Yoga is a science giving health assurance at zero budgets. Yoga is power of creation. Way of living and Rishis, described as “S kill in Action”.

“Be detached do duty, in performing prescribed task with sprit unattached shall mount of highest Bliss” – Bhagavad –Gita

1.31.2 SATTVIC DIET

According to Bhagavad-Gita three types food, Sattvic food (pure), Rajasic food (stimulating), Tamasic food (impure-retain) food.
Sattvic food bring light, purity, peace, morality and calmness to the mind and in soothing and nourishing to the body, promotes life style virtue, strength, health, happiness, purification of inner being and satisfaction.

1.3.1.3 HYPERTENSION

Hypertension happens when the pressure in system gets high enough leading to risks in system. It is also commonly known as high blood pressure, which refers to the amount of pressure in arteries. In diagnosing hypertension, several reading must be taken. If the rate of blood pressure reaches to as high as 140/90 mmHg, then hypertension is present.

1.3.1.4 BLOOD PRESSURE

Blood Pressure is defined as a repeatedly elevated blood pressure exceeding 140 over 90 mmHg a systolic pressure above 140 with a diastolic pressure above 90. Pulse rate the pulse is the number of heart beats per minute. Consistently elevated Blood pressure is called Hypertension.

1.3.1.5 SYSTOLIC BLOOD PRESSURE

Systolic Blood Pressure is the highest level which the arterial blood pressure raises during systolic ejection of blood from the ventricle.

1.3.1.6 DIASTOLIC BLOOD PRESSURE

Diastolic Blood Pressure is the lowest level to which the arterial blood pressure falls in the interval between successive heart beats.

1.3.1.5 BODY MASS INDEX (BMI)

Body Mass Index (BMI) is a relationship between weight and height that is associated with body fat and health risks. Research has identified the health risks associated with a wide range of BMIs (both high and low values).
BMI can be inaccurate in estimating body fat. Athletes with a very muscular build will have a BMI that overestimates body fat. They are leaner than their BMI indicates. On the opposite end, older people and others who have lost muscle may have higher body fat than their BMI indicates.

1.3.1.6 HIGH – DENSITY LIPOPROTEIN (HDL)

A molecule that is a combination of lipids (fats) and proteins are the form in which lipids are transported in the blood. The high density lipoproteins transport cholesterol from the tissues of the body to the liver so it can be gotten rid of (in the bile). HDL cholesterol is therefore considered the “good” cholesterol. The higher the HDL cholesterol level, the lower the risk of coronary artery disease.

1.3.1.7 LOW DENSITY LIPOPROTEIN (LDL)

A lipoprotein that transports cholesterol in the blood: composed of moderate amount of protein and a large amount of cholesterol: high level is thought to be associated with increased risk of coronary heart disease and atherosclerosis. A molecule is a combination of lipid (fat) and protein. Lipoproteins are the form in which lipids are transported in the blood. Low-density lipoprotein (LDL) transports cholesterol from the liver to the tissues of the body. LDL cholesterol is therefore considered the "bad" cholesterol.

1.3.1.8 TRIGLYCERIDES

Triglycerides are a type of fat found in blood. Body uses them for energy. Need some triglycerides for good health. But high triglycerides might raise risk of heart disease and may be a sign of metabolic syndrome.

1.3.1.9 ADJUSTMENT

The act or process of adjusting, a settlement of a claim or debt in a case in which the amount involved is uncertain or full payment is not made. The state of being adjusted, means (such as a mechanism) by which things are adjusted one to
another. A small change that improves something or makes it work better, change that makes it possible for a person to do better or work better in a new situation, act or process of changing or adjusting something (such as a number)

1.31.10 LIFE SATISFACTION

Human is an objective creature always evaluating in life situation, will feel no satisfaction until gains is goals. Perhaps, it can be said that the final aspiration of every human being is to attain their goals and desires and this attainment leads to life satisfaction. Therefore, Life Satisfaction is the central aspect of human welfare. It is ultimate goal and every human being strives to achieve this goal throughout the life.

Life satisfaction is a multidimensional concept related to psychological and environmental life conditions. The term life satisfaction can be split into two words-life and satisfaction.