



WHO Collaborating Centre  
for Traditional Medicine

Morarji Desai National Institute of Yoga  
Ministry of Ayush, Government of India



# YOGA FOR MENTAL HEALTH

ACTIVITY OF WHO CC -TM (Yoga)-IND 118





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## **Yoga for Mental Health**

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#### MESSAGE

I am delighted to present "**Yoga for Mental Health**", published as a Terms of Reference (TOR) activity of the WHO Collaborating Centre (WHO-CC) in Traditional Medicine activity.

Morarji Desai National Institute of Yoga (MDNIY) has been designated the WHO Collaborating Centre for Traditional Medicine (Yoga) in India since April 2013. The institute serves as an effective Yoga resource centre for information exchange on Yoga and plays a prominent role in developing Yoga standards to promote rational use.

There has been an upsurge in global demand for authentic information and knowledge about Yoga worldwide, particularly after the United Nation's declaration of 21st June as the International Day of Yoga on 11 December, 2014.

MDNIY has developed this book after extensive brainstorming with Yoga and modern medical science experts. This book consists of mental health problems, their psychophysiological and neurological mechanisms, the conventional counselling process, and diet for the management of Psychological Health. This book also covers the role of Asana, Pranayama, Dhyana, etc, for the holistic management and prevention of mental health disorders. A glimpse of the evidence based Yoga research protocol is discussed in this book.

This book will be a significant addition to the existing repertoire of knowledge, bringing to the forefront new ideas, developments, and trends in the field of Yoga to promote all aspects related to holistic mental health and well-being.

The collaborative project with WHO has also prepared a mobile app WHO mYoga App. This app carries videos of various Yoga practices performed by trained professionals, with the objective of guiding Yoga aspirants.

I congratulate the Director, MDNIY, and his team for the laudable effort in putting together this useful publication. I hope it will go a long way in imparting yogic values and practices to lead a healthy and meaningful life.

(Rajesh Kotecha)

Date: 19.06.2023

## PREFACE

WHO Collaborating Centre in Traditional Medicine (Yoga) -IND 118 of Morarji Desai National Institute of Yoga (MDNIY), Ministry of Ayush, Government of India, takes pride in contributing to its WHO-CC activities through this book entitled “Yoga for Mental Health”.

WHO has recognised the important contribution of traditional medicine to provide essential health care. In view of supporting WHO in the development of WHO benchmarks for training in Yoga, Morarji Desai National Institute of Yoga, New Delhi, has been designated as WHO collaborating centre in Traditional medicine (Yoga)-IND 118 in India. MDNIY, as the collaborating centre for traditional medicine, aims to harness the potential of traditional medicine through modern science, research, and technology to improve the health and wellness of people and make preventive and curative healthcare, affordable and also accessible to all.

The objectives of the WHO collaborating centres are diverse and include the collection, and dissemination of information on Yoga, standardization of terminology, methods, and procedures generating evidence based information on the safety, quality, and cost-effectiveness of traditional medicine products and therapies, development, and application of appropriate technology, provision of reference substances and other services, participation in collaborative research as well as capacity building through various training programmes.

This book deals with mental health problems, their psychophysiological and neurological mechanisms, the conventional counselling process, and diet for the management of psychological Health. The document describes the diet as per the classical yogic texts. This document also takes into account a balanced diet and the role of diet in the management of mental health issues. Apart from that, it covers all the aspects of Yoga like the eight limbs of Yoga for managing mental health disorders. It covers the role of Asana, Pranayama, Dhyana, etc., for the holistic management and prevention of psychiatric disorders. A glimpse of the evidence based Yoga research protocol is also discussed in this book.

These Guidelines will provide Yoga enthusiasts, therapists, instructors, and other stakeholders with an overview of the general principles, approaches, and activities necessary for managing and preventing mental health problems and living a healthy lifestyle. Incorporating extensive details and following WHO guidelines, this book serves the purpose of integrating the philosophy of Yoga with our daily practice of Yoga through a systematic but simple approach.

Good health is one of the foundations of happiness and well-being. Whether one is a career-oriented professional, a middle-aged homemaker, or is entering his/her twilight years, this book will help everyone understand and manage the key yogic principles and practices for a healthy mind. When the health system grapples with change, the least we can do is take charge of our health. Contributions on each subject and topics are based on the Consultative Committee’s rigorous efforts, procedures, recommendations, research, and deliberations meant to share the best yogic practices.

I hope the publication will be very useful for Yoga enthusiasts, particularly the inquisitive minds searching for timeless truths in modern-day lifestyles.



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# 01 MIND AND ITS IMPORTANCE IN HEALTH AND DISEASE PREVENTION

## Introduction

Mind and body are best buddies, both are dependent on each other. As a matter of fact, they work together rather than independently. For instance, while a thought process shapes a particular emotion on the one hand, on the other, a particular emotion controls the thought process. There is a close association between these two functions of the mind. Both play major roles in determining and nurturing the various dimensions of health in the right direction of wellness. When the mind or psyche is not functioning properly, it may pave the way for many psychological and physiological disorders and illnesses due to a weak immune system. Thus, securing and maintaining the health of the mind and emotions is to be replaced by is of utmost importance to ensuring good health. A healthy person makes important contributions to family, society, country, and world progress; as such, a person would be more productive and constructive.

## Health: Meaning and Importance

Good health is important not only for a person to lead a happy life anywhere in the world but also for the growth, development, and productivity of society as a whole. As per the World Health Organisation (WHO), **'Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.'** (WHO, 1948). Aligning with the above statement, one can say that good mental health is much more than the mere lack of mental disorders. In general, health is understood through certain component such as those listed below.

**Physical health:** Physical health comprises physical fitness and the proper functioning of all organs of the body. It also includes maintaining homeostasis and the metabolism of the body. Homeostasis means the tendency of the body to maintain many of its internal physiological processes at certain optimal levels. Metabolism is concerned with body processes that are involved in breaking down and building up.

**Psychological health:** Psychological health includes normal, healthy emotions, cognitive abilities, and behaviors. A person with good emotional health can handle and manage his/her emotions well. A person with a healthy cognitive process means he/she can perceive and respond appropriately to a situation. In the same way, a person with good behavioral health indicates that the person behaves appropriately and wisely. Therefore, good psychological health enables a person to function effectively in society and deal with day-to-day environmental changes effectively.

**Emotional health:** Emotional health consists of maintaining all aspects of emotions, namely, lively and correct expression of emotions, controlling emotions, understanding the emotions of others properly, and experiencing emotions physiologically in the right way. It is also concerned with maintaining a proper emotional environment. A person with good emotional health, therefore, manages and understands the emotions of self and others efficiently. Such a person is called an emotionally intelligent person.

**Social health:** Social health means how well a person relates to others and to what extent that person is accepted by his/her close ones. Relating affectionately, developing good contacts, and experiencing mutual connectivity are the main aspects of social health. A person with good social health can make good and healthy social adjustments in a new environment without any hurdles. This dimension includes social skills, relationship with others, adjustment skills, assimilation ability, etc. A positive social environment is also an important aspect of social health.

**Spiritual health:** Spiritual health constitutes wishing good for others and looking for aspects beyond our senses. A person with spiritual health is not egoistic. He or she strives for the welfare of others and the community. Such a person is selfless and broad-minded.

## History of Mental Health

The WHO defines mental health as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (WHO, 2001). Dr Brock Chisholm, the first Director-General of WHO, went on to even state that **'There is no health without mental health'**.

Needless to say, the definition and statement of Dr Chisholm amply bring out the positive aspects of mental health. The World Federation for Mental Health, for the first time, celebrated 10 October 1992 as the World Mental Health Day to spread awareness and the importance of mental health in society. Today, 10 October, is globally recognized and celebrated as World Mental Health Day, thus sending out a clear message for the masses that mental health is more than a mere lack of mental disorders.

The perception of wellness, capability, skills, independence, knowledge, and self-growth forms the core of mental health. This perception helps a person to recognize his/her emotional and cognitive abilities and potential too. A mentally healthy person is recognized or identified by the efficient way he/she handles the challenges of day-to-day life and makes positive contributions to society and the country. The concept of psychological health of any person is all about self-actualization where a person grows his/her skills and abilities to not only achieve his/her self-oriented goals but also add new dimensions to his/her personality. Only a healthy person can make a healthy family, and only a healthy family can make a healthy society, and only a healthy society can make a healthy nation. In this chain, every unit is interconnected, with an individual being the smallest unit. Therefore, mental health deserves as much care as one would give to any other aspect of health.

In the mid-19th century, William Sweetzer proposed the term 'mental hygiene' for the first time in the history of mental health. He used the term to spread awareness about positive mental health. Dorothea Lynde Dix (1802-1887) dedicated her whole life to people suffering from mental illness and leading a disgraceful life. The 'mental hygiene movement' that she spearheaded and sustained efforts at lobbying was instrumental in creating the first generation of mental asylums in America. Subsequently, the issue of mental health gained momentum both in the academic and social spheres. Many scholars and social activists started championing the cause. For instance, Meria Jahoda (1963), proposed the following six characteristics of mentally healthy individual:

1. Environment mastery
2. Undistorted perception of reality and growth
3. Autonomy
4. Growth of self-development
5. Self-actualisation
6. Attitude towards self

Carol Ryff (2014), encapsulated the first model of 'psychological well being' and explained the concept under six variables:

1. **Environmental mastery:** feelings of competence and capacity to manage and meet the responsibilities of everyday life



- 2. Personal growth:** capacity for continued development, potential, and openness to new experience
- 3. Purpose in life:** feelings of purpose and having a sense of direction in life and the past and present experiences are meaningful
- 4. Self-acceptance:** the capacity for accepting and acknowledging one's strengths and virtues as well as recognising one's weaknesses
- 5. Positive relationship with others:** the sense that one has warm, satisfying, and trusting relationships and are socially concerned
- 6. Autonomy:** the extent to which one views oneself as self-determining and independent, resisting pressure to meet social expectations

The sustained academic rigour and research interest among scholars on issues related to mental health across the world in subsequent years have succinctly brought out the importance of mental health in society. Today, mental health is being treated as a specialised field of study and is taught in many academic institutions all over the world.

### Concept of Mind in Ancient Indian Knowledge

Researchers, philosophers, neuroscientists, linguists, and psychologists– from ancient to modern times have always shown a keen interest in unveiling the many layers of the mind. What intrigues them is perhaps the very nature, complexity, novelty, and functions of the mind, which determine human behavior, emotions, and cognition.

In India, ancient texts have used the word '*Manas*' (mind) in a wide and varied context. '*Manas*' is understood and explained accordingly by various disciplines. In the Indian context, '*Manas*' has many synonyms such as intellect, *buddhi* knowledge, perception, thought, ideas, conscience, will, etc. However, it '*Manas*' is also called '*Mahat*' or four-fold or '*Antahkaran-Chatushtaya*', which is further categorised into '*Buddhi*' (intellect), '*Manas*' (mind), '*Ahamkar*' (ego-sense), and '*Chitta*' (memory). A few of the ancient texts from the Indian knowledge system (*Vedas, Upanishads,*) that have dealt with various aspects of the mind ('*Manas*') are briefly discussed below.

### Vedas

The oldest scripture in Indian philosophy is known by the name '*Veda*'; There are four Vedas, namely, (a) *Rig Veda*, (b) *Yajur Veda*, (c) *Sama Veda*, and (d) *Atharva Veda*. All notions related to the mind are well discussed and elaborated in the above texts. For instance, *Rig Veda* has discussed the power and role of the mind in happiness and peace, the importance of prayer and the chanting of '*mantras*', and the speed of the mind. According to *Rig Veda* and *Yajur Veda*, the recitation of mantra or chanting/prayers leads to pure and pleasant thoughts in an individual's mind, which are helpful in overcoming any kind of mental pain or distress. This creates positive energy and vibration and alleviates negative energy within and outside the mind and body.

*Yajur Veda* and *Atharva Veda* have explained the concept of mind as pure consciousness, source of knowledge, faculty, or instrument of higher '*Gyan*' or true knowledge. A common point touched on by all four Vedas is that when a person (self or soul) lives in a materialistic world, he/she will face pleasant and unpleasant experiences due to the fulfillment or non-fulfilment of desires and greed. A person experiences different kinds of emotions, such as anger, anxiety, sadness, rage, jealousy, hope, and motivation. At any given point, the dominant emotion in the person would find its expression inwardly or outwardly, as the

case may be. That moment defines the state of mind of that person. The Vedas also suggest remedies (through the recitation of mantras and prayers) for controlling the mind and removing the obstacles in the path of attaining higher consciousness (pure/true knowledge).

## Upanishads

There are over 200 *Upanishads* found in the traditional Indian knowledge system. In *Upanishads*, the concept of mind is understood as *Manas, Ahamkar, Chitta, Buddi, consciousness, and soul*. The mind is understood as much more than the brain, intelligence, or any part of the body. It is explained as 'infinity' and '*Brahma*' or self-knowledge. The focus of discussions and deliberations in the *Upanishads* pertains to the fundamental question, as to 'Who am I?' In other words, the *Upanishads* seek true knowledge about the self.

In the *Amrita bindu Upanishad*, the discussion revolves around two types of minds impure minds and pure minds. A pure mind is desireless, and an impure mind is full of desires and sorrows. The state and nature of the mind define the thoughts and emotions of human beings, which play an important role in the harmony of mind and body. The mind is understood as the root cause of not only the problems but also the solutions. *Kathopanishad* highlights that the impermanence of the mind cannot give permanence of peace and happiness. Attachment to impermanent things will only give distress and anger. So, a thought is both an object and an instrument. Pure thoughts can make a mind pure, and *vice versa* for impure thoughts. Impurity is embedded in sorrow, depression, anxiety, jealousy, fear, and a harmful attitude. Such impurities in mind cannot bring peace and happiness, because only a pure mind can fetch those. The mind can not only liberate a person from all mental health problems but also attach one to all such problems. *Kathopanishad* also says that clarity of mind or thought is always important, because the lack of it gives rise to confusion and cloudiness of thoughts. This confusion, in turn, gives rise to irritation, anger, sadness, disruption of peace of mind, etc.

*Chhandogay Upanishad* discusses the importance of speech, mind, will, and memory. The mind is supreme and beyond everything. Mind can be understood as the self and the individuality within us. All functions are within it.

*The Paingala Upanishad* deals with mental functions in a detailed manner, like the causes of mental afflictions, pain and suffering.

*The Taittiriya Upanishad* discusses about how the five sheaths (*Panch Koshas*) of self-integration, the subtle body, and the gross body function coherently in an organism. The *Panch Koshas* are (a) *Anandamaya*, (b) *Vijnanamaya*, (c) *Manomaya*, (d) *Pranamaya*, and (e) *Annamayakosa*. Self is seated in the innermost *kosha*, i.e. *Anandamaya*. All the *koshas* are interconnected, and they function through different types of '*Prana*' (*vayu*). Our self is determined by the development and functioning of *kosha* in light of consciousness.

In the *Mandukyopanishad*, four states of consciousness are discussed: (a) *Jagrat*, (b) *Swapna*, (c) *Sushupti*, and (d) *Turiya*. These are not only the four states of consciousness but also the states of mind.

Similarly, one can find mind being discussed in other *Upanishads* as well.

## Yoga Vashishta

The *Yoga Vashishta* refers to mind as a mere thought; thought is the mind motion, and its actions are directed by the nature of thoughts; the result of actions is felt in every part of the body through the mind. This ancient text also describes how mental disturbances (*Adhi*) produce physical disturbances (*Vyadhi*). Emotions refer to the feeling aspect of behavior such as irritation, rage, despair, sadness, love, and liking.



## The Bhagavad Gita

The *Bhagavad Gita* is one of the most popular ancient Indian texts across the world. In the *Bhagavad Gita*, the mind is understood in the more broader terms of 'Purush' and 'Prakriti'. The *Gita* also refers to mind the as *Mahat*, *Buddhi*, *Ahamkar*, *Gunas* and, *Panchbutas*, *Tanmatra*, etc. As per the *Bhagavad Gita*, the mind is a powerful instrument that creates attachment or detachment from worldly things. This attachment to or detachment gives rise to all negative or positive emotions. Doubt, sadness, depression, anxiety, rage, happiness, satisfaction, etc., are all products of the mind. The *Gita* also explains the means of calming and controlling the mind in detail. Ways of *Sthithprajya* (stability of Mind) have also been highlighted and discussed.

## Yoga Philosophy

In Yoga philosophy, mind or intellect can be understood as 'Chitta'. The 'Vrittis' (disturbance of mind) is understood as the root cause of all mental pains. *Vrittis* are created in mind by 'Kleshas' (afflictions). False knowledge, desire, and attachment create *Kleshas* in the mind. *Kleshas* can be either painful or not. The Yoga philosophy describes five types of verities and *chittabhumi* (state of mind). All have their own effects on the mind and body. It also highlights the symptoms and effects of mental problems in a detailed manner. Mental and physical health problems are named 'Adhi' and 'Vyadhi'. Diseases or illnesses in body, such as psychosomatic diseases, arise due to mental conflicts or stress. *Abhyasa-Vairayaga* is a method suggested in Yoga philosophy for reducing this mental pain.

## Charak Samhita

*Charak Samhita* highlights the role of the mind in the happiness or sadness of human life. The following verse from the text brings it out clearly.

औत्सुक्यारतिसंमोहकरमिन्द्रियनाशनम्।  
दुर्बलस्यसुसंवृद्धद्व्याधिसारिष्टमेवच।।

चरक संहिता  
(1/10/20)

**The person who has become impatient, who is in a dilemma, and whose organs have lost the energy, such a person becomes mentally weak and it is difficult to cure him.**

Maharishi *Charak* gave importance to the hardness of the mind and distinguished it into a weak mind and a strong mind. Hardiness means not to devastate even at the time of calamity. While living a life, one needs a strong or hardy mind. He has classified mind into three types, namely, *Pravarsattvasar*, *Madhyasattvasar* and *Heensattvasar*. The distinguishing features of the three types are given below.

1. **Pravarsattvasar**: A person who does not get baffled easily, has good understanding and memory, who is involved and alert to complete a work, whose behavior is natural and unpolished, and who is ready to bear the pain at the time of calamity or disease, is said to be of *Pravarsattvasar* type.
2. **Madhyasattvasar**: A person who bears the pain because other people are also bearing the same and who needs social support and understanding from others belongs to the *Madhyasattvasar* type.
3. **Heensattvasar**: A person who may be strong in a body but cannot bear the pain and face the calamity and becomes baffled by slight troubles comes under the *Heensattvasar* type.

## Western Psychology

In western psychology or philosophy, Philosopher Rene Descartes was the one who developed the concept of dualism – a dichotomy between the mind and body or mind and matter. In modern science, the mind is often understood as the software and the brain as its hardware. The question has always been there as to whether the mind is matter or energy or a field or an emotional state.

In most scientific literature, conventional psychology in particular, the mind is considered an epiphenomenon on the body (particularly the brain), which is a mass of matter. The neurobiological approach tries to explain the mind as a by-product of physicochemical processes that involve billions of neurons in the human brain and its various components are the thought process, emotions, intelligence, and awareness.

The scientific study of psychology began with schools. The first school was 'Structuralism', founded by E.B. Titchner. He embraced a dualistic position on the mind body problem in the form of psychophysical parallelism. He defined psychology as the science of consciousness and 'Introspection' as a method for studying consciousness.

William James and Harvey Carr, established the school known as 'Functionalism'. According to them, psychology is the study of mental activity. This activity is concerned with the acquisition, fixation, retention, organisation, and evolution of experiences, and their subsequent utilisation in the guidance of conduct. Carr had stated that there are two aspects to every individual: the mind and the body, both must be taken into account in any analysis of behavior. He was also of the view that all mental activity is psychophysical in the sense that both mind and body are involved in any task.

Sigmund Freud classified the mind into three parts: conscious, subconscious, and unconscious. They play important roles in the development of neurosis or, stress, anxiety, etc.

Another school is the 'Gestalt School'. The word 'Gestalt' means 'whole' or 'organisation'. Instead of trying to break consciousness into its elements, Gestalt psychologists argued that our perceptions are organised so that the 'whole is greater than the sum of its parts'. This school stimulated interest in cognitive topics such as perception and problem-solving.

Another important school is 'Behaviorism', founded by J.B. Watson. He gave a severe jolt to the concept of mind and mental activities. He considered overt and covert behaviors as the subject matter of psychology. Because of this school of thought, the study of the mind was relegated to the back burner. He believed that the 'mind', 'consciousness', 'image', and the like have no place in scientific and objective science; they are the carryovers from the days of mental philosophy. The aim of Behaviorism, as stated by Watson, is characteristically forthright and objective: given the stimulus, to be able to predict the response, and given the response, to be able to predict the antecedent stimulus.

In the 1950s, a heated debate arose between behaviorists and linguists about how children acquire knowledge. The behaviorists, led by B.F. Skinner, claimed that language is acquired through the basic principles of learning. Even the definition of psychology has changed. Michael Passer and Ronald Smith in 2008, published a book entitled, 'Psychology: the Science of Mind and Behavior'. They have defined the mind in terms of internal states and processes – such as thoughts and feelings, that cannot be seen directly and must be inferred from observable, measurable responses. In this view, humans are information processors whose actions are governed by thoughts.





The American Psychological Association defined mind broadly as all intellectual and psychological phenomena of an organism, encompassing motivational, affective, behavioral, perceptual, and cognitive systems; that is, the organised totality of an organism's mental and psychic processes and the structural and functional cognitive components on which they depend. Here, the cognitive system is understood as all mental functions such as perception, thinking, attention, memory, language, problems, and loving, the concept of mind is explained as the function and process among the mind, the body and the brain.

## Neuroscience

In the field of neuroscience, the human brain is understood as the most complex organ or part of the body. Although it contributes only 2% in the whole body weight, it consumes 20% of the oxygen that we breathe in. Every simple to complex mental process is a product of brain functions; it includes simple motor functions such as walking, running, sitting, eating, sleeping, judging, creativity, decision-making, memory, imagination, dreaming, and thinking. Neuroscience believes that all these cognitive functions or other functions of the brain are due to neurochemical changes and their processes. If the brain gets infected, then it blocks the smooth functioning of neurotransmitters and neurons, triggering psychological and physical problems related to health. Health is the outcome of healthy neuro-chemical process of the brain.

From the arguments put forth thus far, it is clear that a mental function is fundamentally interconnected with physical and social functions and health outcomes. For example, depression is a risk factor for cancer and heart disease. It is also apparent that the mind is superior to all other sense organs.



## 02 EPIDEMIOLOGY OF MENTAL HEALTH STATUS

In this chapter, we see the epidemiology of mental health problems. There have been many efforts made to estimate the percentage of people suffering from various mental health problems across the world and in India. WHO and the National Institute of Mental Health (NIMH) have also made attempts in this direction.

### Prevalence/Epidemiology of Mental Health Problems Worldwide

Mental health problems are spreading at a fast rate due to multiple reasons. In 2017, a study was conducted by the Institute for Health Metrics and Evaluation reported in their flagship of global burden of disease study that approximately 792 million people across the world suffer from mental disorders and that lead a poor quality of life. This is slightly more than one in ten people globally (10.7%) (Global Burden of Disease study, 2017). Among mental disorders, depression is most common among people. In 2017, about 264 million people were diagnosed with depressive disorders in the world (Table 1, Global Burden of Disease study, 2017). In spite of this fact, supported by data, most countries are not paying attention or giving due importance to mental health issues. Many countries (about 40%) do not even have basic mental health facilities and infrastructure. Here are figures of mental health problems worldwide:

**Table 1. Mental health problems worldwide**

Psychological disorder	People with psychological disorder in 2017 (%)	People with psychological disorder in 2017 (no.)	Psychological disorder by gender in 2017 (%)
Any mental health issue	10.7%	792 million	9.3% males 11.9% females
Depression	3.4% (2%–6%)	264 million	2.7% males 4.1% females
Anxiety	3.8% (2.5%–7%)	284 million	2.8% males 4.7% females
Bipolar	0.6% (0.3%–1.2%)	46 million	0.55% males
Eating (clinical anorexia and bulimia)	0.2% (0.1%–1%)	16 million	0.13% males 0.29% females
Schizophrenia	0.3% (0.2–0.4%)	20 million	0.26% males 0.25% females
Mental or substance-use	13%	970 million	12.6% males
Alcohol use	1.4%	107 million	2% males
Drug use (excluding alcohol)	0.9%	71 million	1.3% males

Source: <https://ourworldindata.org/mental-health>

### Prevalence/Epidemiology of Mental Health Problems in India

The National Institute of Mental Health (NIMH) had conducted a survey in 2015-16 across India. According to this survey, 10.6% were suffering from mental health problems.<sup>1</sup> Life-span prevalence rate of 13.7% was recorded in the population. These masses required active and intense professional help because they had mental health problems at the diagnosis level.

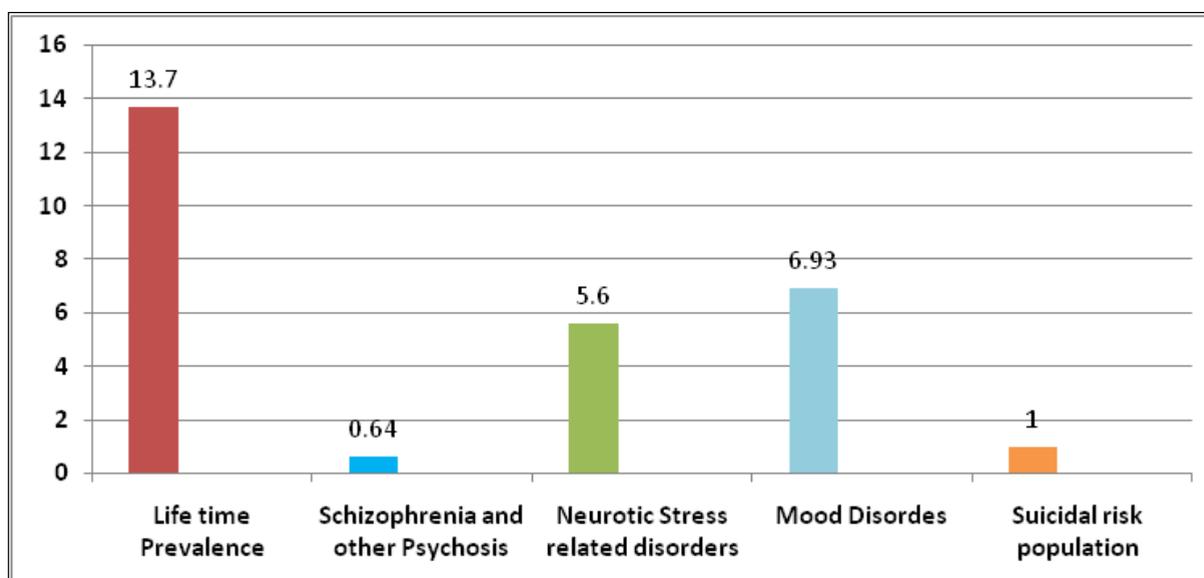
<sup>1</sup> The NIMH Survey does not include tobacco use.

Evaluation and assessment were done according to the International Classification of Disorders (ICD-10) range of mental disorders F10–F49. It is estimated that about 150 million people of India need vigorous help and treatment. These disorders are more prevalent in metropolitan cities than in rural and small cities, where the population is less than 10 million. The incidence and occurrence of schizophrenia and other psychoses accounted for 0.64%, mood disorders stood at 5.6%, and neurotic or stress-related disorders at 6.93%. These figures are three times more in urban areas of metro cities as compared to rural areas. The rate and occurrence of mental illnesses are quite higher in metro cities in comparison to small cities or villages. The reasons for higher rates in metro cities could be attributed to such factors as busy life style, work pressure, no feeling of being at home, poor relationships with or support from family, and food.

It is also estimated that about 1% of the Indian population is prone to committing suicide. This is more prevalent among people from the 40–49 age group (1.19%), about 1.14 % of whom are females and 1.71% of people of urban metros were found susceptible to the risk of committing suicide. Half of the people surveyed had reported suicide as a co-morbid illnesses and the other half stated it as a primary diagnosis.

The survey also revealed that roughly 1% of the population suffered from severe mental illness in the past, and about 0.8% were found mentally unhealthy and diagnosed as schizophrenia, mood disorders or other psychosis and behavioral disorders. They are mostly men from urban areas. People in the age group of 30–49 years were seriously affected by poor mental health. People from this age group are generally perceived to be energetic, productive, and efficient in their contributions to any country. Therefore, it becomes extremely important that adequate attention is given to this segment of the population.

The survey also brought out the gender difference in the rate of suffering from mental illness. The male population suffered more (13.9%) in comparison to the female population (7.5%). Mood-related disorders such as depression, bipolar, stress, acrophobia, generalized anxiety disorders, and dissociative disorders, anxiety obsessive compulsion, etc. were more prevalent in females as compared to males. The rate of prevalence of mental illness in teenagers/adolescents (13–17 years group) was found to be 7.3%. About 9.8 million teenagers were found to be in need of active care and intervention, with no apparent gender discrimination. Figure 1 captures some important data that emerged from the survey in a nutshell.



**Figure1.** Population suffering from mental health problems (%)

**Source:** Ministry of Health and Family Welfare Government of India; NIMH Survey of India, Summary Report 2015-16

## 03 ROLE OF MIND IN PHYSICAL PROBLEMS

Humankind for centuries, has shown the ability to adapt well to all adverse conditions – be it physical or mental. Just as the body is capable of surviving any bodily or physical test, the mind has also displayed the ability to acclimate, adjust, and prepare itself for all kinds of mental mishaps. At the same time, however strong an individual’s mental health may be, that individual will be subjected to some harm if any of the mental conditions perdure. In other words, just as a body is subject to wear and tear if exposed to adversities for prolonged periods, the mind will also face its own challenges while enduring prolonged mental stress and other disorders, irrespective of its intrinsic strength. The effects of these mental sufferings are not just limited to the brain’s dysfunctional behavior but have an effect on the physical health as well.

### Effect of Poor Mental Health on the Structure and Functions of Brain

Several studies have been conducted to identify the effects of stress on the human nervous system over the years; many of them reveal that prolonged stress may cause changes to the structure of the brain. The change in the structure of brain brings about a decline in the brain's activity and its reaction mechanism to stress and anxiety (Lupien *et al.*, 2009). When disturbances of the mind persist for a long enough period so as to classify it as chronic stress, such disturbances also result in the degeneration of brain cells and tissues, leading to a reduction of the brain mass (Sarahian *et al.*, 2014). The chemical reactions and hormones actively influence the human nervous system in a way to impact its response and reaction towards surroundings, people, situations, etc. (De Kloet, 2000). Yaribeygi *et al.*, (2017) have done a study to assess the structural and functional changes in the brain when it is subjected to stress. Table 2 summarises the findings of this study.

**Table 2. Effect of stress on brain and its functions**

	Cognitive functions	Area/s of brain	Structural changes	Functional changes
Neurosis (stress, anxiety) and Human brain	Memory	Hippocampus (Glucocorticoid receptors)  Amygdala	Atrophy and neurogenesis disorders, suppression and shortening of dendritic branches, decrease in the total count of neurons and alteration in synaptic terminals, significant alterations in hippocampus volume, changes in long-term processing of brain	Deterioration of cognitive functions, dementia, Alzheimer, other memory problems such as poor verbal, visuo-spatial memory, disturbance in hippocampus-dependent loading data
	Cognitions (Thinking, reasoning, perception, language, attention, and learning)	Hippocampus, amygdala, and temporal lobe	Atrophy in hippocampal area (left and right), ventricular enlargement, increase in the volume of amygdala	Adverse effects on cognitive functions inducing behavioral and mood disorders; problems in hippocampus, amygdala (memory, executive functions), and left temporal lobe lead to problems in the language zone, impaired reasoning, judgment, and decision-making

**Source:** Yaribeygi H *et al.*(2017)

## Effect on Immune System

The mind has the power to affect the immune system as well. The biological effects of stress on the body are not only detrimental to the existing body functions but also hold power to inhibit the proper functioning of the human immune system. Studies have shown that people under constant stressful environments are likely to fall under the weather more frequently. Therefore, it has been firmly concluded that a person's average dealing with stress and anxiety on a daily basis is directly proportional to the extent of the decline in the physical health of that particular individual. It means that repetitive exposure to stressful environment hampers the immune system and, consequently body's recovery and disease-fighting capabilities.

## Effect on Cardiovascular System

The cardiovascular system, or the 'heart' (in layman's language) is the most important central unit of the body. What an engine is to a machine, the heart is to the body. Society is no stranger to the harmful effects of stress on different body parts, including the heart. But what seems to be overlooked is the extent to which stress cripples cardiovascular health. Doctors, researchers, and other experts have emphasised for years the importance of a healthy mind and heart for a healthy body. These experts have now reported that stress, if it persists for longer periods, can cause severe damage to the heart. An increase in the levels of cortisol and other stress hormones can gravely affect the blood vessels, arteries, and blood pressure levels, and a continuation of the increase in their levels can cause an acceleration in the heart rate, which leads to risks of heart attack, hypertension, high levels of cholesterol, and stroke (Stephoe and Kivimaki, 2013).

## Effect on Gut and Digestion

It can never be emphasised enough that stress can harm major body functions to an unimaginable extent. Every study has deduced that stress not only harms but even has the capability to damage certain body systems altogether. Similarly, just as stress impairs the heart and mind, it can also cripple the gastrointestinal system (GIS). As the GIS is linked to the brain, its functions connected to brain cells and tissues go haywire when subjected to nervous tension. Stress also hampers amygdala (collection of cells near the base of the brain) and the ventral tegmental area (VTA), (one of the two major dopaminergic areas in the brain, which is involved with various cognitive and emotional processes). The intestinal activities such as permeability, absorption, and acid secretion are also massively disturbed by nervous tension and stress. Stress majorly contributes to the dysfunction of the dynamic physiology of the intestine region, leading to common but troubling diseases such as inflammation, indigestion, and constipation. This may turn into serious issues such as spastic colon, commonly known as irritable bowel syndrome (IBS) exhibiting common symptoms like cramping, abdominal pain, increased gas, altered bowel habits, food intolerance, and bloating.

## Effect on Hormones

Hormones are responsible for the growth and development through puberty, moods, and many other major functions of the body. Any disturbance in the endocrine system can create hormonal imbalances in the body. Hormonal imbalance is a medical condition in which hormones behave in a chaotic manner so as to deviate from what they are supposed to do. The ratios in which different hormones are present in the body are also a determining factor of one's health. During hormonal imbalances, these ratios are disturbed to an extent where hormones sometimes perform completely opposite the functions required of them. While other factors, such as pregnancy and menopause, trigger hormonal imbalances, stress has become a major contributor these days.

The above discussion clearly brings home the point that stress impacts a body significantly through hormones or the endocrine system.

The endocrine system, which is responsible for the manufacturing and secretion of hormones, is made up of all the important glands of the body. This system is responsible for regulating the body functions through the release of hormones. The glands listed below comprise the endocrine system.

- **Hypothalamus Gland:** The hypothalamus gland produces the hormone oxytocin. This hormone connects the endocrine system to the nervous system and is responsible for moods, hunger, and the release of hormones from other glands.
- **Thyroid Gland:** The thyroid gland produces triiodothyronine, thyroxine and, calcitonin. While thyroxine controls the heart rate, calcitonin in regulates the burning of calories. This gland is, therefore, responsible for weight gain or loss.
- **Pineal Gland:** The pineal gland produces melatonin, which is responsible for sleep.
- **Testes:** The testes gland is present in males and makes testosterone, which is responsible for the development of the male reproductive system.
- **Ovaries:** Ovaries are present in females and produce estragon and progesterone. This gland is responsible for development of the female reproductive system.
- **Adrenal Gland:** The adrenal gland produces hormones adrenaline, noradrenaline, aldosterone, and cortisol (stress hormones). This gland regulates such functions as blood pressure, heart rate, and stress response.
- **Pituitary Gland:** The pituitary gland is a tiny gland, but it is known as the master gland as it controls all the other glands of the endocrine system.

To reiterate the main point in the earlier discussion, hormonal imbalance, also known as endocrine disorders, occurs when the quantity of hormones produced by the glands is either too low or too high. These imbalances are capable of causing many short-term and chronic diseases.

Studies have shown that stress has been a major deflector of hormones that cause such disorders. Adrenal insufficiency is a disorder where too little cortisol is produced, leading to fatigue. Another stress-triggered endocrine disorder is polycystic ovary syndrome (PCOS/PCOD) in which the levels of estragon and progesterone are disturbed. It affects the menstrual cycle, causes acne, growth of facial hair, and in severe cases, can render a woman infertile too. Precocious puberty is caused by the release of reproductive hormones at a higher scale and, as a result, a child may unexpectedly hit puberty around 8–10 years of age. Too much production of hormones from the thyroid gland causes hypothyroidism, which results in tiredness, joint pain, weight loss or gain.

## 04 ROLE OF MIND IN PSYCHOLOGICAL ISSUES

Health is and should be the most prized possession of any human being. While researchers, doctors, teachers, and even the elders in the family have been laying emphasis on the importance of health for ages, most of them refer the physical health and well-being. How fit a person is physically has become the measure of our overall health. What we have failed to acknowledge all these years is that health is two-dimensional in nature. It cannot just be summarised in blood sugar levels, heart rate, platelet count, etc.

A healthy mind is as important as a healthy body, if not more so. As we have been programmed to be ignorant of our mental health, addressing the issues of the mind might seem a bit like an alien concept. Any person can suffer from mental ailments, and not all of them are as horrifying as we think them to be. In fact, some of the mental issues are so common and prevalent in almost every human being in the modern age that one would not want them to qualify as mental issues. Many people are surprised to know that conditions as common as stress and anxiety are mental issues too. Of course, there is classification and categorisation of the different types of mental disorders on the basis of their severity. Not all mental issues pose a danger to a patient's life. As a matter of fact, mental illness does not consume its victim right away. It does so bit by bit. It can change a person's personality, behavior, thought process, and even emotions. Sometimes, a person shows obvious signs of suffering from a mental disorder or issue, these include extreme mood swings, sudden fits of anxiety, irritability, withdrawal, confusion, uncontrollable anger, disinterest, etc. Sometimes the signs may be as subtle as fatigue, loss of appetite, tiredness, lack of concentration, excessive or lack of sleep, and so on that they get associated with general physical ailments.

The point here is that mental issues and disorders are real, they exist. Anyone can fall prey to them, and they are detrimental to an individual's overall health and sometimes even life itself. It is also important to realise that the sufferer is not responsible for their suffering. It is not the patient's fault that they are affected by a mental illness because, in most cases, they are unaware of their condition themselves. This makes it more important that such issues are acknowledged and treated in time. To treat them, their root cause must be identified. Understanding what causes mental disorders will help better in treat them. While modern science has its own take on treating mental disorders, ancient texts and scriptures also provide insights into the causes and treatments of mental issues.

Ancient texts and teachings have intricately explained the causes of mental illness. Teachings in the *Patanjali Yoga Sutra* provide identification, explanation, and modification of causes to cure mental illness. According to *Patanjali Yoga Sutra*, five *Kleshas*, or afflictions are the main reasons for all mental suffering. The five negative states of mind or 'afflictions' are as given below.

1. *Avidya* (ignorance)
2. *Asmita* (egoism)
3. *Raga* (attachment to material world)
4. *Dvesa* (aversion or hatred)
5. *Abinivesah* (fear of death and attachment for life).

These five *Kleshas* are responsible for all the mental diseases that can be concluded in two terms: *Adhi* (mental problems) and *Vyadhi* (physical problems). *Avidya* is seen as the root cause of all *Kleshas* and problems. It comes from a lack of knowledge or misperception of reality and the situation. *Avidya* disturbs the equilibrium of all cognitive, emotional, and behavioral pillars of a personality. This faulty mental process generates faulty *Samskaras* (sub-conscious impressions) and makes a person greedy and motivates him or her to desire-based action. This is called as *Chitta-Vritti* (modification of mind). *Vrittis* are categorised into five sources:

1. *Pramana* (proof or valid cognition),
2. *Viparyaya* (illusion or invalid cognition),
3. *Vikalpa* (objectless verbal cognition),
4. *Nidra* (sleep or absence of distinct cognition), and
5. *Smriti* (memory or mental recollection of past cognition).

When a person gets attached to personal gain and loss, then it leads to pain and affliction and is called *Klistavritti*. This is created with attachment and desire with worldly objects. Non-fulfilment of any desire or need results in various types of psychological pain (*Dukh*) and physical turmoil in a person. Such physical or mental pains are called *Daurmansya* (grief), *Angamejayatva* (unsteady body), *Shvasa* and *Prashvasa* (breathing problems), and *Vikshepa* (distraction). In such conditions, the mind is totally distracted and will have poor concentration. This state is called as *Chitta Vikshepa* by Sage Patanjali. Feelings of restlessness, low mood, pessimistic thoughts, anxiety, shortness of breath, suffocation, cloudiness of thought, poor decision-making, and distress are experienced by a person in the *Chitta Vikshepa* state. This is a condition of the mind, or *Manas* or poor mental health.

Instability of mind can bring imbalances in *Pancha Koshas*. These *Pancha Koshas* are said to be residing in the following *areas* of *Trisareera*:

- *Sthulasareera* or gross body, which constitutes the *Annamaya Kosha* (physical body) and *Pranamaya Kosha* (vital);
- *Sukshmasareera* or subtle body comprises the *Pranamaya Kosha* (vital), *Manomaya Kosha* (emotional aspect), and *Vijnanamaya Kosha* (intellectual); and
- *Karana sharira* or causal body comprises the *Anandamaya Kosha* (blissfulness).

*Manomaya Kosha* is the sphere of the mind, which is closely tied to the physical body. This can lead to the imbalance of energy in *Prana*, which is associated with the inhalation process that may disturb the vital energy. In a healthy and positive state of mind, energy flows from the higher to the lower sheaths. However, if there is imbalance in the lower sheaths, the free movement of energy gets blocked. In this case, the *Nadis* [*Ida Nadi* (sympathetic nervous system) and *Pingla Nadi* (sympathetic nervous system)] and *Chakras* become disturbed and start functioning abnormally. The *Chakra* is like the energy point, and the *Nadis* are like wires that transmit energy to the whole body. *Nadis* can also be called channels through which *Pranashakti* (vital force) and *Manas shakti* (mental force) travel throughout the body. The above discussion is to primarily drive home the point that *Chitta-vrittis* bring imbalance and disturbance to the complete process of mind and body. Mind also plays an important role in disease progression. This disruption blocks the growth of self-development and becomes an obstacle in the path of attaining spirituality. Table 3, shows the effects of disturbances in *Pancha Koshas* on mental health.



**Table 3. Disturbance of *Pancha Kosha* and its effects on mental health**

Kosha	Body	Functions	Disturbed states
Annamaya	Sthul	Food, sleep, and other basic needs related to the physical body	Physical problems such as fatigue
Pranamaya	Sukshma	Vayu or Prana/vitality	Problems related to breathing such as hyperventilation
Manomaya	Sukshma	Emotional functions	Agitation, irritability, disturbed mood, anger
Vigyanmaya	Sukshma	Cognition	Poor attention concentration, memory, decision making
Anandmaya	Causal	Blissfulness	Peace, calmness, or satisfaction

According to Yoga philosophy, the root cause of distress is *Avidya*. *Avidya* arises from faulty perceptions and interpretations (cognition) as a result of interactions in the world. This *Avidya* leads to disturbances in *Manomaya Kosha*. In the context of *Pancha Kosha*, the development of a disease can be explained in the following four distinct stages.

- 1. Psychic phase:** Psychological changes happen in a person due to excessive psychic trauma or too much of mental and emotional disturbance such, as irritation. Such disturbances (in the *Manomaya Kosha*) over-activate the central nervous system affecting its normal, harmonious functions such as sleep.
- 2. Psychosomatic phase:** In the psychosomatic phase, functional disturbances occur in the *Pranamaya Kosha*. It triggers hypertension, an increased heart rate, and respiratory problems.
- 3. Somatic phase:** In the somatic phase, there will be disturbances in the *Annamaya Kosha*. Such disturbances will lead to increased functioning of all the organs, affecting a particular system of body such as the thyroid gland. If it affects the thyroid gland, it can lead to diseases like hypothyroidism.
- 4. Organic phase:** In the organic phase, disturbances settle down in the target organ with full-fledged changes, and the entire symptoms manifests on the physical body or *Annamaya Kosha*, in form of a disease, or *Vyadhi*. Bronchial asthma or peptic ulcer is an example.

The *Bhagavad Gita* points out that all health problems are products of the mind. Mind is the cause as well as the instrument to overcome distress and discomfort. This ancient and popular text cites two main reasons for various mental diseases and illnesses: (1) attachment to materialistic objects and (2) desire to fulfill all the needs, or greed. These two reasons lead to all kinds of *Dukha* or pain. The *Gita* also points out the importance of the steadiness of mind (a calm and clear mind without any doubt and confusion). '*Yathadiponivathasthonaingte*' (verse no. 6.19) means to place the lamp in a windless situation because the mind is very fickle. Mind is a safe place and shelter for all kinds of negative emotions such as *Kama*, *Krodh*, *Lobh*, *Mada*, *Matsarya*, greed, jealousy, delusion or confusion, and arrogance. These negative emotions derail our intelligence and judgmental power. It is difficult to control the mind, make it steady and stable because the mind is always moving and is powerful, a troublemaker, easily distracted, and easily carried away by our senses. This mind can be both an enemy and a friend of anyone depending upon the person's ability to control and handle it.

According to Buddha's philosophy, life is a journey where nothing is permanent; everything is just a part and parcel of life. Attachment to worldly things and desires for their attainment give pain and suffering. Life becomes painful and unbearable. Perception, emotions, intelligence, and form are determined by

our *Karma* (action). Mental suffering or psychological problems all depend on the nature of the deeds performed by the individual. The mind is the medium and instrument for both bondage (pain) and liberation (happiness).

*Mahrishi Charak* was of the view that the mind is a powerful instrument that provides direction and control the senses, liberation, self-growth or deterioration, clarity or confusion, and reasoning or irrational thoughts. All mental processes originate from the mind. *Mahrishi Charak* propounded the 'Triguna' theory, which comprises the three *Gunas* or attributes (inherent traits and qualities) in an individual. The three *gunas* are:

1. *Sattva* (calm and steady mind, pure with valid knowledge, cheerful, optimistic, patience, kindness);
2. *Rajas* (aggression, energy, jealousy, competitiveness, enthusiasm); and
3. *Tamas* (dullness, darkness, slowness, pessimism, negative thoughts).

The dominance of any one trait in a person determines the personality type of the person. *Ayurveda*, the traditional medical system of India, also talks about insanity (*Unmada*) and spirit control (*Bhutonmada*). In *Ayurveda*, psychopathology and psychological disturbances are understood and explained through the imbalance of '*Prakriti*' (*Vatt, Pitt, Kaph*) and *Gunas*.

### Brain Functions/Role of Neurotransmitters

Every study in this area has its own explanations for normal and abnormal human behavior. Neuroscientists explain the reason and cause of mental illness through imbalances of neurotransmitters. Deregulation of any neurotransmitter may lead to serious mental illness or disease. Listed below are three major neurotransmitters and their related psychiatric problems.

- **Serotonin:** In the case of depression, the level of serotonin is found to be lower than normal, which leads to a mood downswing, depressive thoughts, disturbed sleep and appetite, decreased libido, etc. It may be normalised by giving medications that block the reabsorption of serotonin into neurons, which trigger and enhance the mood.
- **Glutamate:** Glutamate is a neurotransmitter found in the brain and central nervous system. It plays a role in every excitatory function of the brain. Faulty production and an imbalance of glutamate leads to many mental disorders such as Schizophrenia, Mood disorders, Panic disorders, Attention Deficit Hyperactive Disorder (ADHD), Post-Traumatic Stress Disorder (PTSD), Obsessive Compulsive Disorder (OCD), and Epilepsy.
- **Dopamine:** Deregulation of dopaminergic activities may lead to many psychiatric disorders in a person. Dopamine is basically involved in the functions and regulation of impulses, cognition, and quality of life. Dopamine influences the formation of thoughts and mind clarity. Low levels of dopamine trigger many mental health issues and illnesses, such as schizophrenia, Parkinson's disease, depression, and suicidal thoughts.

Human behavior and mental functions are directly governed and determined by seven major neurotransmitters. Disturbance and deregulation of any one of these lead to serious mental health issues, psychosis, and neurotic problems.

### Psychological Disorders: Signs and Symptoms

There are many psychological ailments that are classified as disorders. Some of the serious disorders include Depression, Anxiety, ADHD, Schizophrenia, Bipolar, OCD, Phobia, Panic, PTSD, and Autism.



All mental disturbances, especially serious ones, exhibit physical and psychological signs and symptoms. Research studies, surveys, experiments, and illustrations have shown that these psychological disorders retard mental health in all possible ways. They affect the mental, social, emotional, behavioral, and cognitive functions of psychological health. There are various signs and symptoms of mental problems such as anti-social behavior, low self-esteem, personality complexes, loss of short-term memory, mood disorders, and a lack of concentration.

Some of the disorders mentioned above are discussed below for a better understanding of mental issues and how they affect a person.

### **Bipolar disorder**

General mood swings are common to all human beings. However, when mood changes become sudden, frequent, and unexpected, they are called bipolar disorder, which comes under the classification of 'serious mental disorder'. Bipolar disorder was previously known as manic depressive illness or manic depression. There are three types of bipolar disorder: (a) bipolar disorder with manic symptoms, (b) bipolar disorder with depressive symptoms, and (c) cyclothymic disorder (also known as cyclothymia).

Bipolar disorder includes mood swings from extreme anger or irritability to the sudden shift of laughter, shifting between feeling very high and very low, engaging in arguments too often, bickering, and disturbances in the sleeping pattern.

### **Anxiety disorder**

The Oxford Dictionary defines anxiety as a feeling of worry, nervousness, or unease about something with an uncertain outcome. Anxiety is the brain's reaction to stress in order to prepare one for potential danger and is common among all living beings. Anxiety disorder or generalised anxiety disorder (GAD) is an extreme case of anxiety where the sufferer overwhelmingly worries and gets anxious for even petty things in life every now and then to an extent where he/she may experience elevated heart rate, sweating, nausea, etc. These worries are recursive, persistent, they worsen with time. The symptoms of anxiety disorder include fatigue, restlessness, fidgeting, muscle tension, irritability, disturbances in sleep, and shaking, sweating, falling short of breath, the feeling of being out of control, and feeling of being doomed.

### **Panic disorder**

People with the panic disorder report intermittent apprehension and panic attacks (attacks of sudden, short-lived anxiety) in relation to particular situations or spontaneous panic attacks with no apparent cause. They often take action to avoid being in particular situations in order to prevent those feelings, which may develop into agoraphobia. The essential feature of agoraphobia is anxiety about being in places or situations from which escape might be difficult, embarrassing, or help may not be available.

### **Stress-related disorder**

When a person is not able to cope with a situation, be it sociological or personal, the person comes under stress. Sometimes, it can be serious ones like PTSD, anxiety, phobias, and adjustment problems with the environment. The psychological process starts with events that intimidate, hurt, or provoke. Such intimidation, hurt, or provocation may surpass a person's accessible coping resources to adapt to the event or situation. In this disorder, the symptoms vary from person, to person and so do the reasons too. Although stress is a common factor in modern times, its impact on mental health is completely



dependent of how a person copes with it. In other words, how a person manages such factors as a novelty, the rate of incidence of stress, intensity, personal interpretation of the input, and genetic or experiential will determine the intensity of the mental health disorder.

## Depression

Depression can be related to broader mental health issues afflicted by negative influences. A person suffering from depression: (a) will not have any interest or involvement in his/her surroundings either emotionally or physically, (b) does not enjoy the day-to-day activities and experiences, and (c) will always remain sad, affecting his/her physical health (muscle pain, fatigue, laziness, weakness, etc.). Hopelessness, guilt, shame, disturbed sleep and appetite are the main symptoms of depression. Depression can be the reason for weight loss or weight gain, depending on how it affects the individual.

## Obsessive compulsive disorder

In OCD, an individual's mind is preoccupied with a constant idea, image, or impulse, which leads the individual towards compulsive/repetitive behavior or action. Such actions are against the will, repetitive, and involuntary in nature. Obsession can be distressing, and it can interfere with a person's life due to disturbing thoughts. When someone keeps worrying about imaginary things such as safety, cleanliness, checking, arranging, and orderliness, which are examples of obsession, that person can be suffering from OCD.

The World Health Organization in its International Classification of Disease (ICD) has classified the major psychological disorders with their signs and symptoms. Table 4, shows this classification as per ICD-10.

**Table 4. Classification of major psychological disorders as per ICD-10**

Code	Mental health Disorders Types	Major Signs and symptoms
<b>F00–F009</b>	Organic mental disorders (vascular dementia, Alzheimer)	Cognitive functions impairment, judgment, logical function, and agitation
<b>F10–F19</b>	Disorder due to psychoactive substance-use disorder (alcohol, cannabis, etc.)	Dependence on substance, harmful use; disturbed sleep, appetite, and social functioning; changes in mood, behavior, and cognitive functions
<b>F20–F29</b>	Schizophrenia, schizotypal and delusional disorders	Disturbed thought and perception, hallucination, delusion, paranoia, disturbed social functions, sleep, and appetite
<b>F30–F39</b>	Mood disorders (mania, depression, and bipolar)	Significant change in mood (feeling sad/hyperactive), disturbed social functions, sleep, and appetite
<b>F39–F49</b>	Neurotic, stress-related and somatoform disorders (OCD, PTSD, GAD, phobia)	Stress, anticipatory anxiety, anger, negative and depressive thoughts, excessive fear
<b>F50–F69</b>	Behavioral syndrome associated with psychological disturbance (eating disorders, sleep, tics, bulimia, etc.)	Mood swing, excessive preoccupation with food, calories, weight, diet, disturbed sleep, appetite, and social functions, physical weakness, and problems
<b>F70–F79</b>	Adult personality disorders and behavioral disorders	Disturbed social and occupational function, mood swing, abnormal personality trait, long-life problems



<b>F80–F89</b>	Mental retardation	Below-average intellectual ability (less than 70 I.Q.), failure to achieve developmental milestones, deficiency in cognitive functions
<b>F90–F009</b>	developmental Disorders (autism, learning disability [LD], childhood disintegrative disorder [CDD], ADHD, pervasive development disorder [PDD])	Neuro-developmental disorders, marked impairment in non-verbal social function, lack of social and emotional reciprocity
<b>F00–F100</b>	Behavioral and emotional disorders usually occurring in childhood and adolescence (ODD, CD, Tic, phobia, elective mutism, enuresis, encopresis, mood disorders, nail biting, anxiety)	Significant behavioral and emotional disturbance, fear, anxiety, poor control in bladder and bowel system

## 05 FACTORS AFFECTING MENTAL HEALTH CONDITION

Many psychological theories, factors, and approaches exist that not only determine but also predict the mental health condition of a person. There are several well-defined explanations and models too that give reasons for the abnormality and normality of human behavior such as the Health Belief Model, Diathesis Stress Model, and Bio-psychosocial Model in different spectra.

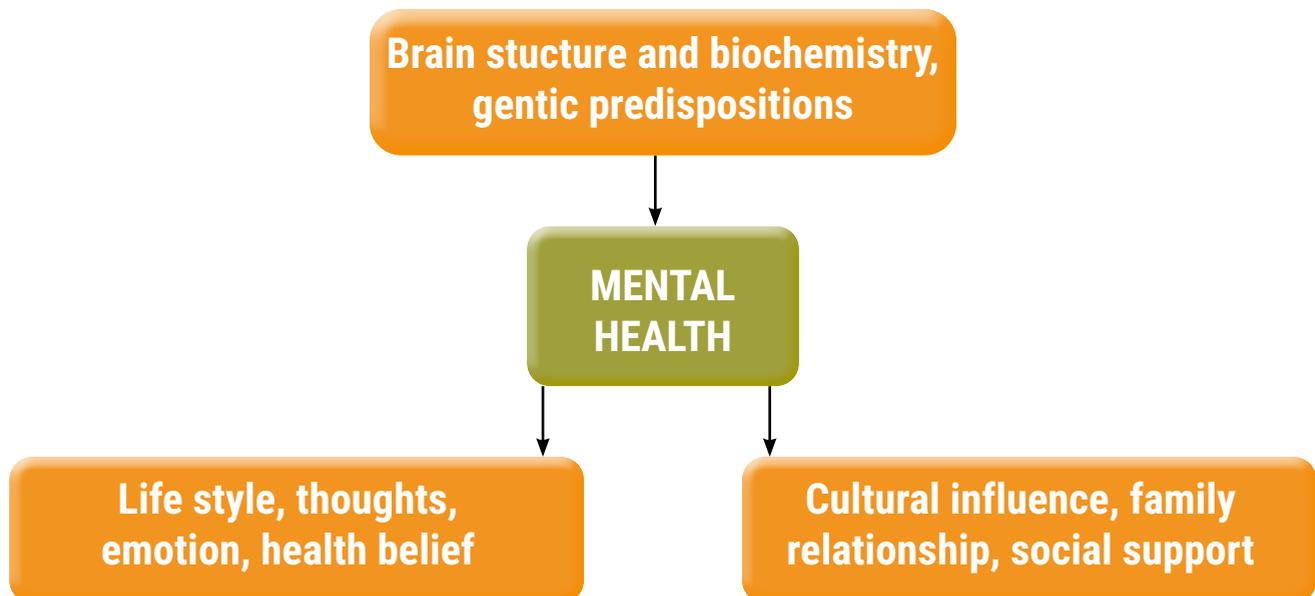
- **Health Belief Model:** The Health Belief Model attempts to explain and predict the health behavior of a person on two features – threat perception and behavioral assessment. Threat perception, in turn, is characterised by two main beliefs: (1) always worried about health or some illness and the adverse effects of the results of the illness, other one consist (2) the behavioural assessment which is also divided in two different sets of belief : (a) first set of whom are worried about the positivity of th recommended health behavior and the other one, (b) are those who are rather always focus on the cost of, of barriers to, nacting the behaviours. the cost of, or barriers to ,enacting the behaviors. This model was proposed by Becker (1979) and Rosenstock (1984).
- **Diathesis–stress model:** The Diathesis–stress model illustrates that a mental disorder results from genetic vulnerability and environmental stress. Multiple factors act as catalysts for the abnormal behavior of a person. This model is relevant in determining the normality and abnormality of the behavior of a person. For instance, if a child’s one or both parents have depression then it will increase the hereditary vulnerability to depression in the child. The child may suffer from depression or other mental illnesses if he/she is unable to deal with environmental challenges efficiently in the future.
- **Bio-psychosocial Model:** The Bio-psychosocial Model was first conceptualised by George Engle in 1980. According to this model, many factors such as biological, psychological, and social can influence mental health and happiness. Several psychologists find this research useful to diagnose their patients and cure them from their mental problems.

There are several factors that influence our mind and give us many mental health issues. Broadly, these factors are categorised into three: biological, psychological, and socio-environmental; these factors are briefly touched up below.

### 1. Biological factors

Biological factors define a problem, including genetic issues. They play an important role in determining the state of mental health in a person. Physical health problems such as mal-nutrient or mental development (neurodevelopment) or sometimes even serious genetic deformities and chromosomal abnormalities all can be elucidated by this. Biological factors can affect brain developments across generations leading to mental health issues. For instance, a child may suffer from depression, psychosis, or other kinds of mental health issues if some ancestors of the child had suffered mental health issues. The severity of such ailments can damage the brain of a child even before its birth (e.g., a serious disease like Schizophrenia). Mental retardation, ADHD, Down syndrome are illnesses linked directly to prenatal complications arising out of biological factors, chromosomal abnormalities, or neurodevelopmental problems. Research studies also show that if mental illnesses such as depression and bipolar disorder run in the family tree, then there is a high chance of such illnesses getting passed on to the next generation. This would mean that any person from such a family will be more vulnerable to attacks of mental health issues.

Sometimes accidents also lead to serious brain injuries, which can lead to stroke or other kinds of mental health issues. Head injuries of serious order can lead to organic mental illnesses such as induced psychosis (hallucinations or delusions), affective disorders (bipolar affective disorders, depression), vascular dementia, and Alzheimer's. These are irreversible due to permanent changes in the brain. Alzheimer disease leads to serious complications and problems related to cognitive and affective functions such as memory, attention, concentration, irritability, confusion, and problem solving. Other issues related to brain injuries are drug addiction, alcohol addiction, and other toxic things. Those who have heart-related issues should be taken care of as they are more vulnerable to mental health issues. This may also lead to anxiety, depression, or psychosis.



## 2. Psychological factors:

Psychological factors refer to an individual's thought process, self-esteem, personality traits, care-givers burden belief system, faulty learning and modelling, parenting style, identity crisis, cognitive labelling, and coping skills with environmental challenges, etc. All this leads to serious mental illnesses or problems in an individual when handled inefficiently. These problems are faced by people of all ages, from children to older people.

Children and adolescents often feel pressure and adjustment problems in school and peer groups, which may lead to poor academic performance, isolation, or other behavioral problems. Over-criticism or inappropriate support while parenting may also lead to serious behavioral problems and mental illnesses such as depression, loneliness, suicidal behavior, aggressiveness, disobedience, substance abuse, or others. In adolescents, there is always an identity crisis and role confusion because at this stage they want to do work independently and take initiative, but when discouraged, they may develop low self-esteem and feeling of inferiority. This may become part of the personality if it is left untreated and unsolved. So, there are a lot of factors that contribute to making an adult a weak and fragile personality. He or she may learn faulty coping skills such as avoidance, impulsivity, or impatient or seeing things in black and white, pessimistic, anxious, and competitiveness.

Adults feel burnout due to poverty, financial crisis, unemployment, traumatic life experiences, relationship and adjustment problems (including marital conflict, divorce). These can often trigger stress and other psychological problems. Faulty coping style or belief system, and specific personality traits like 'Type

A' are more vulnerable to mental health problems because they are unable to handle and solve their life problems in an inappropriate manner. They get hopeless and depressed. Prolonged stress may turn into serious psychological (psychosis and neurosis) and physical complications and diseases.

Old age itself is a challenging phase, like a new-born baby, but with the slight difference of declining cognitive and other functions. Old people, after retiring from their long-performing occupations, face a sudden decline in their income. The situation of having nothing meaningful to do and with expenses remaining the same or increasing makes old people insecure. This new and drastic change in their life often leaves them with a feeling of loneliness and worthlessness. The sudden loss of a loved one or friend, the affliction with chronic disease, etc., add to the misery. Natural degeneration of their physical health and stamina, along with decreasing cognitive and motor activity, adds to their frustration. Negative thoughts and decreasing energy levels often make older people vulnerable to chronic physical and mental illness. Studies show geriatric depression, mood fluctuation, and other behavioral problems are becoming more common in older people. Even any chronic physical illness becomes the reason for depression and suicidal ideation among the older population.

### 3. Socio-environmental factors:

Socio-environmental factors include an individual's cultural influence, dissatisfaction with a job or relationship, family relationship, poor parenting, social support, poverty, etc. An individual's behavior always depends upon the surroundings that the person lives in. This may be family, social environment, or financial status. Healthy family relationships, economic factors, and adequate social support are always seen as contributing positively to good mental health. Lack of any one factor may lead to serious mental health problems. Many times, it has been seen that a financial crisis leads a person towards harmful use of substances and suicide, or tangled relationship due to abnormal emotional and behavioral problems. In adolescents, social support and peer group always play a major role in their life. Poverty and associated conditions of unemployment, low educational level, deprivation, and homelessness are all strong markers of mental illness.

Poverty is the most important factor strongly associated with mental illness. The stresses of poverty can lead to mental illness, and mental illness can make a person poorer. When a person is affected by a severe mental illness, he or she is more likely to be jobless and may not be able to do their work properly. A person with mental illness and his/her family may suffer terrible economic hardship.

Knowingly or unknowingly, society becomes harsh upon the family or person who suffers from mental illness; this situation worsens the person's illness as they face more difficulties or become the victim of more brutalities.

Stigma is defined as when societies isolate people or behave differently based on their mental illness. Fear of being isolated from such stigmatic behaviors in societies leads people or families to hide their diseases. Due to this, sometimes a patient faces extremities even from his/her family, for example locking the person in a room or chaining the person. This discrimination and isolation makes the person mentally more unstable and weaken the prognosis of recovery. Due to prejudice and superstitions towards mental diseases and mental patients, even in the 21st century, people suffering from mental ailments are not coming forward to disclose them in public. They feel shame for opening about their glitches in front of society or others. People with mental illness do not want to go for treatments making their lives ever more miserable.

Burden of caregiver: The people who help or care for a person with mental illness have to face more difficulties as compared to other caregivers. People who are caregivers to mentally ill people often suffer



from stress, insecurity, depression, etc. and due to which they also face problems like poverty or being isolated by societies.

Table 5, captures the factors affecting mental health in a nutshell.

**Table 5. Factors affecting mental health**

Bio-physical	Psychological	Social-environmental
<ul style="list-style-type: none"> <li>Genetic abnormalities</li> <li>Imbalances of neurotransmitter</li> <li>Family history mental problems</li> <li>Prenatal complication</li> <li>Traumatic brain injury</li> <li>Chronic medical conditions</li> <li>Poor nutrition</li> <li>Lack of sleep</li> <li>Use of drugs/substances like use of alcohol</li> <li>LGBT</li> </ul>	<ul style="list-style-type: none"> <li>Stressful life events</li> <li>Health belief system</li> <li>Cognitive labelling</li> <li>Traumatic life experience</li> <li>Low self-esteem</li> <li>Emotional immaturity</li> <li>Poor coping skills</li> <li>Poor communication skills</li> <li>Gender identity crisis</li> </ul>	<ul style="list-style-type: none"> <li>Loneliness</li> <li>Family conflict</li> <li>Discouraging environment</li> <li>Financial crisis/low economics status</li> <li>Unemployed</li> <li>Work-related stress</li> <li>Social and gender inequality</li> <li>Loss of loved one</li> <li>Pollution</li> <li>Increasing rate of crime</li> <li>Urbanisation</li> <li>Family structure</li> <li>Parenting style</li> <li>Poverty</li> <li>Burden for care giver of person with mental illness</li> </ul>

### Factors promoting mental health

There are many factors that enhance wellness and improve the quality of life and longevity. These could be biological, psychological, social, or environmental factors (Table 6). Mental health of individuals is determined by all the above factors. This includes prenatal and postnatal care, family environment and socio-economic status, and parental care. Individual personality and coping skills are formed and shaped by them. This helps the individual to fight and combat with any kind of stress the future. Therefore, mental health remains positive and strong.

**Table 6. Factors that promote mental health**

Biological	Psychological	Social	Environmental
<ul style="list-style-type: none"> <li>Pre-natal and post-natal care</li> <li>No use of any drug or substance</li> <li>Adequate sleep</li> <li>Complete nutrition</li> </ul>	<ul style="list-style-type: none"> <li>Self-esteem</li> <li>Adequate coping and problem-solving skills</li> <li>Confidence</li> <li>Communication skills</li> <li>Positive thoughts</li> </ul>	<ul style="list-style-type: none"> <li>Social support of family and friends</li> <li>Good parental care</li> <li>Physical security</li> <li>Emotional security</li> <li>Satisfaction with work</li> <li>Respect</li> </ul>	<ul style="list-style-type: none"> <li>Social and gender equality</li> <li>Physical security and safety</li> <li>Healthy and pollution-free environment</li> </ul>

## 06 DIET AND NUTRITION FOR MENTAL HEALTH

### 'You are what you eat'.

This is an ancient proverb. Beyond its literal meaning, the proverb also connotes that 'to acquire health and happiness, one needs to live a balanced life'. This connotation is well-entrenched in India's ancient knowledge system, which comprises Vedic scriptures, Upanishads, the Bhagwada Gita, Patanjali's Yogasutra, etc. In Bhagwad Gita, Lord Krishna says to Arjuna (Chapter 6, Verse 17):

युक्ताहारविहारस्य युक्तचेष्टस्य कर्मसु।  
युक्तस्वप्नावबोधस्य योगो भवति दुःखहा

yukta-haraviharasya yukta-chesteshya karmasu  
yukta-swapanvabodhasya yogo bhavati dukhaa (B.G. 6.17)

It means: The one, whose diet and movements are balanced,  
Whose actions are proper,  
Whose hours of sleeping and waking up are regular, and  
Who follows the path of meditation,  
Is the destroyer of pain and unhappiness.

In the same chapter, Lord *Krishna* further clarifies this by explaining that eating or sleeping too much food, starving, or remaining awake all the time is not healthy. Even modern science and advanced medical data analysis back this school of thought.

Yoga is defined as the process of integrating one's complete persona at all levels. As per Yogic teachings, every individual's life force is a combination of three attributes known as *Sattva*, *Rajas*, and *Tamas*. These three attributes are present in varying degrees within everyone's persona, and they dominate their lifestyle choices (including eating habits) accordingly. So, in the same parlance, a 'balanced diet' is defined as the precise combination of food ingestion, that enables to balance restoration among these three attributes at spiritual, mental, and physical levels. It is important to note that Yoga even categorises every food item (just like human personality types) as *Satvik*, *Rajasik*, and *Tamasik* based on its effect on the mind and body (Table 7).

**Table 7. Effect of food on the mind and body according to Ayurveda /Yoga**

Kinds of food	Food items	Effects
<i>Satvik</i> food	Fresh vegetables, whole grains, milk, nuts, fruit juice, herbal items, dairy products, seeds	Cheerfulness, will power, peace, optimistic, positivity, good immunity, clarity of thought, bliss
<i>Rajasik</i> food	Spicy, meat, fish, excessive salty or sweet, oily foods, high calorie food, coffee, stimulant foods	Restlessness, anxiety, anger, irritability, impulsiveness, highly energetic, competitiveness, high risk-taking behavior
<i>Tamasik</i> food	Fragmented foods, bakery, sausage, pastry, preserved foods, alcohol or any kind of drink, pickle, jam, ice cream, candy or chocolate	Negativity, dullness, pessimistic, depressed thoughts and mood, poor immunity, low confidence, highly suggestible, irritable

The Human brain is usually considered the intersection and triple focal point of an individual's spiritual, mental, and physical well-being. It is widely regarded as the most intricate and sophisticated system in the entire known living environment and endlessly owns the responsibility of driving manifold tasks. Like any other complex mechanism, the human brain also requires persistent nurturing and care. In accordance with the saying '**Healthy mind lives in a healthy body**', it is innately important to understand that the objective of the intake of a proper and balanced diet is to attain mental agility and self-control in addition to maintaining a healthy body.

Over the years, numerous research studies have shown that the daily food intake habits have a direct proportional impact on the mind functions, which consequently modulate one's mood, personality and behavioral instincts. Naturopathy advises that food is the basic medicine and balanced eating is the first step to achieve a persistent healthy living. As a matter of fact, balanced food contributes more than 50% to the good health of an individual. It is generally believed that the best way to consume any food item is in its natural form, to the maximum possible extent (e.g., fresh juices, fruits, boiled vegetables, soup, and salads). It should also be well understood that certain groups of foods should be avoided as much as possible as they are found to inflict a negative influence on brain functions (O'Neil *et al.*, 2014; Beyer and Payne, 2016). The food items in these groups generally initiate a temporary mood alteration (e.g., Caffeine and chocolate) and prevent creation of necessary brain nutrients (e.g., saturated fats such as butter, lard, palm oil; highly processed items such as junk food and meat products; sweetened confectionaries, ice creams, etc. that have a high glycemic index). The main components of balanced nourishment and some of their primary benefits are mentioned below.

### Fats and proteins

Essential fats and amino acids, when ingested in the requisite amounts, have been found to greatly support healthy neurotransmission activity. They are also known to mitigate the oxidant-induced negative impacts on mental fitness. Studies have shown that low levels of omega-3 and omega-6 fats and high saturated fat result in a variety of mental health concerns, such as depression, bad concentration, and memory loss. At the same, time a balanced intake of these fats will immensely help in controlling bipolar depressive symptoms and slowing down the progression of cognitive problems.

Research findings have concretely demonstrated that these necessary fatty and amino acids offer a better mental health portfolio, keeping the other lifestyle factors constant (income, age, and other eating patterns). These food constituents also invigorate academic capabilities in the growing age and reduce cognitive impairment risk in the middle age.

### Carbohydrates

Carbohydrates are naturally occurring polysaccharides that profoundly stimulate the mental verdure. Eating a carbohydrate-rich palate that is low on glycemic index revitalises the neurotransmitter rebalancing mechanism, boosts antioxidant defences, and greatly stabilises stress levels. It is also imperative to note that carbohydrates significantly stimulate the blood glucose control system, which, in turn, reduces mental ailments as an indirect consequence.

### Vitamins and minerals

Studies clearly show that an increased intake of fruits and vegetables leads to high levels of mental well-being in both males and females (Stranges *et al*, 2014). They provide vital amounts of vitamins and minerals (also known as micronutrients), which drive blood purification and immunity boosting bodily activities. They also form crucial building blocks in the protection of mental health by participating in the process of (a) converting carbohydrates to glucose, (b) developing healthy brain cells through fatty acids, and (c) refurbishing neurotransmitters using amino acids.

Table 8 gives the sources of essential nutrients and what their deficiency can lead to.

**Table 8. Essential nutrition, effect of deficiency, and food sources**

Nutrient	Effect of deficiency	Source
Vitamin B1	Decreasing cognitive functions (attention and concentration)	Grains, pulses, fruits, vegetables
Vitamin B3	Low mood	Grains, high niacin foods, vegetables
Vitamin B5	Weakens memory, anxiety	Grains, fruits, vegetables, peanuts
Vitamin B6	Anxiety, stress, low mood, poor recall	Wheat, pulse, ragi, fruits (banana), carrot, soya bean
Vitamin B12	Forgetfulness, cloudiness, psychoses	Meat, fish, milk, cheese, yoghurt, eggs
Vitamin C	Depression	Vegetables, fresh fruit
Folic acid	Anxiety, depression, psychosis	Green leafy vegetables
Magnesium	Irritability, insomnia, depression	Green vegetables, nuts, seeds
Selenium	Irritability, depression	Wheat germ, brewer's yeast, liver fish, garlic, sunflower seeds, Brazil nuts, whole grains
Zinc	Confusion, thought blocking, depression, loss of appetite, lack of motivation	Oysters, nuts, seeds, fish

**Source:** Holford (2003)

Several research studies have investigated the vital importance of diet in the diagnosis and treatment of various mental health problems; a few of which are briefly dealt with below.

### Depression

Pharmacological and non-pharmacological treatments (psychotherapy, mindfulness, yoga, etc.) have always been considered the baseline interventions for depression. In recent years, the diet has also emerged as a powerful therapeutic approach to controlling it, as depression is associated with low levels of zinc and vitamins B1, B2, and C. It is evident that standard treatments, ably supplemented with micronutrients, can result in a greater reduction in the incidence of depression and bipolar disorder symptoms.

### Schizophrenia

Studies have found that people with schizophrenia have lower levels of polyunsaturated fatty acids and antioxidant enzymes in their bodies as compared to normal people. Further research is being carried out to identify specific mechanisms through which diet can work in conjunction with other treatment options to prevent or alleviate schizophrenia symptoms.

### Attention Deficit Hyperactive Disorder (ADHD)

Deficiencies in micronutrients (especially iron, magnesium, and zinc) have been identified as the primary culprit in ADHD symptomatic pupils and teenagers. Studies have also shown that increased intake of these micronutrients can significantly improve the success rate of dealing with these ailments' signatures, either in conjunction with normal medication or as a stand-alone suppository methodology.

### Dementia

Research studies have revealed that there is a positive correlation between low saturated fat intake and high vitamins and minerals intake in the preclusion of most common causes of dementia, such as Alzheimer's and Parkinson's. It is worth noting that even the ongoing rate of such diseases can be significantly deferred by piggybacking proper eating habits in coordination with a traditional medicinal slant.

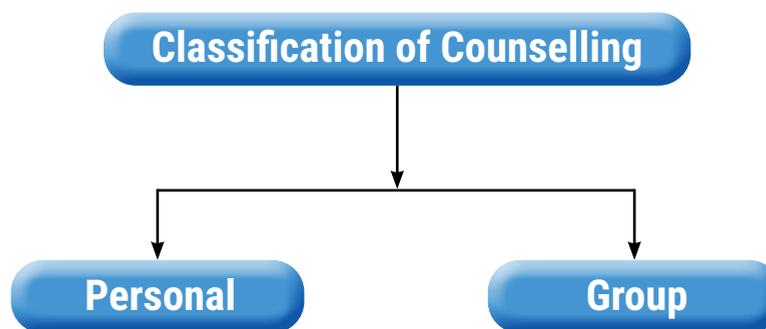
## 07 | ROLE OF COUNSELLING AND EDUCATION

Counselling is a systematic and structured process where a counsellor establishes rapport with his/her client first by expressing his/her concern and sincerity towards the client. Here, he/she does not only understand the problem but also helps him/her to remove the confusion from the client's mind and bring clarity in thoughts regarding the issues. Here, the role of the counsellor is to guide the client to explore solutions and polish the problem-solving skills for proper handling and management of the environmental challenges. This whole process will boost the confidence and self-esteem of the client. In 1997, the American Counselling Association (ACA) proposed the definition of counselling as follows:

**Counselling is the application of mental health, psychological or human development principles, through cognitive, affective, behavioral or systemic interventions, strategies that address wellness, personal growth, or career.**

### Types of Counselling

Counselling can be classified into two broad categories: Personal and Group.



**Personal counselling:** Personal counselling is also known as individual or client-centred counselling. In this counselling, there is discussion between only two persons, i.e., the counsellor and the client. The aim of the counsellor is to establish a proper rapport with the client and develop the trust in the relationship. This is based on the ethics of confidentiality of all the information received from the client. Empathy and trust are the main virtues of any successful counselling. Individual counselling is usually planned with those people who suffer from anxiety, depression, career-related problems, stress, etc. Through this method, the counsellor not only helps the client to solve the problems and issues but also enhances the coping skills so that the client can handle any challenges in the future.

**Group counselling:** Group counselling is planned with those people who are facing common problems in their life and the solution will also be the same for them. This is done in a closed group following the ethics of confidentiality. The outcome of such counselling is always found to be effective because the client realises that he/she is not alone suffering the problem and it increases awareness of self. This helps a client to enhance new coping skills that are learned from the group. In the closed group, the process of brainstorming for a new creative method gets speeded up and the members are seen to support each other emotionally too. Members easily ventilate their pent-up emotions and feel relaxed and calm in sessions. Group counselling is found to be effective in treating addiction-related illnesses or group problems.

## Goals of Counselling

Counselling or Psychotherapy is always done with certain goals and purposes, which are as listed below.

- **Insight:** The foremost goal of counselling is to develop an understanding about the client's problems and educate the client about nature, course, cause, and effect of the issues. This is helpful in facilitating the process in the right direction.
- **Self-knowledge:** Counselling helps to develop a proper understanding about self (self-knowledge) in the course of thought, action, and emotions. This works as a guide to know the self by accepting own thoughts and complex emotions.
- **Self-acceptance:** When understanding about the self is established, then it leads to self-acceptance. When the self-acceptance goal is reached, a person willingly accepts and incorporates the views that are incongruent with his own self or criticism. The area of self-acceptance becomes wider and smooth so that self-perception becomes strong and not easily by negatives and altered perception.
- **Self-actualisation:** Through self-actualisation, counselling helps to optimise and maximise self-skills and potentialities.
- **Coping skills:** Counselling helps improve coping skills through acquiring new abilities and knowledge and enhance potentialities and competencies.
- **Enhance social and emotional intelligence:** Counselling helps one to acquire new social skills by maintaining eye contact without fidgeting and losing confidence, improve communication skills, become assertive, revise old relationships, and improve emotional intelligence by understanding and managing own and other's emotions. One learns to express and manage his/her negative (anger, anxiety, etc.) and positive (happiness) emotions.
- **Changes in thought process:** Counselling helps to bring about changes voluntarily to loosen rigid thought patterns and irrational beliefs that build the negative and destructive image about self and others.
- **Behavior modification:** Through counselling, one modifies the negative and abnormal behavior through correction of irrational beliefs, thoughts, and emotions. This will bring changes in maladaptive behavior and help to learn adaptive and productive behavior.
- **Crisis Intervention & Management:** It is used when some has faced small or large scale of crisis in his/her life. Here the aim is to provide sensitive, non-intrusive, psychologically strengthening help in the first instance, avoiding connotations of psychopathology. Crisis intervention is concerned primarily with restoration of the level of functioning that existed prior to the crisis.
- **Transcendental and spiritual meaning:** Therapy has become for many an avenue for the exploration of existential, spiritual or metaphysical meaning and transcendental experience. The existential, humanistic and transpersonal approaches lend themselves most explicitly to such aspirations.

## Counselling in Different Setting

- ✓ **Educational counselling:** Educational counselling helps students to solve problems related to their academics, peer group, vocations, and confusion. It helps students to choose a subject or stream for further education, etc. This is often seen as a reason for stress and anxiety among students
- ✓ **Individual counselling:** Individual counselling deals with any kind of problems of a person that blocks the road to happiness and raises distress. The nature of problems could be personal, interpersonal, social, or emotional, etc.; these problems could disturb sleep, which can lead to serious mental health problems.



- ✓ **Vocational counselling:** Vocational counselling is planned when a person has serious problems in choosing the right profession or career for himself/herself.
- ✓ **Child counselling:** Child counselling deals with children's behavioral and emotional problems that tend to block a healthy growth of development and adopt a faulty process of personality development.
- ✓ **Marriage and family counselling:** Marriage and family counselling is used in handling the problems with relationship, expressed emotions, communication, and dynamics of family and family-support-related issues such as adjustment. Adjustment issues may lead to mental health problems such as stress and anxiety disorders.
- ✓ **Rehabilitation counselling:** Rehabilitation counselling help those persons who suffer from chronic mental illness and are unable to function properly and live independently in community due to their disabilities. This counselling provide straining for occupational and social skills, etc.
- ✓ **Substance-abuse counselling:** In substance-abuse counselling, patients are diagnosed and treated by a counsellor by helping them to solve their problems and facilitating rehabilitations. The success rate of substance-abuse counselling is not quite good for prolong period of time. Relapse rate is also high due to stress, lack of motivation, financial problems, peer group, poor coping skills, low tolerance level, etc. Sometimes, the client becomes depressed due to abstinence from substances for a longer duration; here the counsellor helps the client to regain his/her confidence and self-esteem.

### Counselling as per developmental stages Groups

- **Counselling during pre-natal and post-natal period:** It includes counselling regarding pre-natal care (food, nutrition, prohibition of addictive substance, other care), development of foetus, educate about monitoring of developmental milestones (recognise the behavioral and psychological problems in baby) during the growth of the baby along with the detection of early signs of any kind of developmental problems. This counselling helps to educate the mother about self and baby's care during pregnancy as well as post-delivery about factors and reasons that affect the mental health. Lack of knowledge and education related to pre-natal and post-natal care leads to serious mental health issues in mother and children; late identification can lead to poor prognosis.
- **Counselling for children:** Counselling helps children to learn appropriate coping skills to deal with social and behavioral problems such as bed wetting, eating clay, anger outburst, hyperactivity, and disobedience. Many a time, children do not delay their need due to impulsivity and impatience creating behavioral and emotional problems in them such as anxiety, stress, tantrum, nagging, and anger. Through counselling, delay of need gratification is developed through counselling and behavioral management. Children are also taught to vent out their anger or negative emotions in an appropriate and socially acceptable way through learning of proper communication skills and other ways. Ethical values and moralities are also cultivated in children. This helps children to learn right conduct and behavior so that they can minimise the problems caused by lack of ethical values and obedience. Problems related to scholastic work and school are also managed (e.g., dyslexia, speech, reading, writing, arithmetic problems, substance use, etc.). Counselling sessions and behavioral management or therapy effectively target the problem and provide better management through shaping of desired and appropriate behavior. At the same time, such sessions also discourage problematic and inappropriate behaviors in children.
- **Counselling for adolescents:** Adolescence is a critical period for mental, social, and emotional well-being and development. Counselling is one of the important modalities to treat any kind of problematic behavior, peer-group problems, academic problems, relationship issues, substance abuse, guilt, identity crisis related problems, anxiety or depression, impulsivity, aggression, suicidal

behavior related problems, etc. A counsellor helps adolescents to deal with their personal and interpersonal problems. In some cases, counsellors also plan to do family counselling along with individual counselling for solving the problems and develop personal skills.

- If these problems are left untreated, they may turn to suicidal behavior. This group is always at risk. If problems at this stage are not solved, they may come up in later stages of life and become a component of their personality. Talk therapy and counselling are important to solve their age-related problems and motivate them to move on in their life.
- **Counselling for adults:** Counselling helps an adult to heal and learn more constructive ways to deal with the problems or issues in his or her life. This can be supportive when a person is under high stress, such as starting a new career or going through a divorce; counselling for families and couples may help salvage marital and divorce issues. If untreated or unresolved, this issue may lead to serious mental health and adjustment problems for any adult. A counsellor plans therapeutic management according to problems and helps the client to solve them and improve the quality of life.
- **Counselling for geriatric population:** Becoming aged or older is itself a challenge for everybody. A person goes through a lot of changes, including behavioral, emotional, and cognitive problems with memory, attention or concentration, slowness of motor activity, emptiness or isolation, chronic disease, financial crisis, feeling useless or dependent, depression, anxiety, physical problems, grief, and many more. Geriatric counselling helps older people to learn those effective skills that will help them to handle the challenges of old age and also encourage the feeling of acceptance and respect for this new beginning. This therapeutic process helps develop the feeling of confidence, energy, enthusiasm, optimism, and improve the wellness of the person.
- **Counselling for caregivers of patients:** Caregivers of patients with mental illness plays crucial and precious role in their life. They take care of each and everything of a patient, including day-to-day activities (bathing, eating, grooming, etc.), medication, regularising the hospital check-up, and monitoring the severity and improvement of illness. In India, almost 90% of people are living in joint families; if someone suffers from mental illness, then the whole family gets affected and is engaged in the care of that person who is ill. Many studies have found that family therapy and intervention are quite supportive and encouraging in the treatment of mental illness. The rate of relapse becomes slow and prognosis becomes good. A caring family or member is a blessing for patients with mental illness. At the same time, there is a huge burden on the family members as they are always on duty and in alert mode. They become the shadow of the patient for his welfare and forget to take care of themselves. Counsellors and mental health professionals play an important role in planning therapies and management protocols. Such interventions not only help in teaching the coping skills to identify their own behavioral (poor coping skills) and emotional (anxiety, depression, frustration, hopelessness, pessimistic, suicidal ideation) issues at early stage but also manage effectively. This will definitely improve the quality of life of both.

Supportive counselling and group sessions are really helpful for caregivers. Such sessions recharge the caregiver with full of enthusiasm and hope in future by knowing the fact that they are not alone with this problem and also learn new skills and creative views. Motivational therapies have also shown positive results in such cases. In this area, remarkable attempts were made by Dr. Vidya Sagar between 1950 and 1960 in Amritsar (Punjab, India). He took both group session and individual session for both the patient and his/her family member. In this session, the patient learned to reduce hostility towards the family member and the family member learned to manage the patient at home and became positive about the burden felt by them for illness. They were also psycho-educated about the course, sign, and symptoms of illness, identification of relapse and develop the insight.



## 08 ROLE OF YOGA IN MENTAL HEALTH

The word 'healthy' comes from two words: 'heal' and 'thy'. 'Heal' means cure or to make whole or sound and well, and 'thy' means your; thus 'healthy' means to make yourself whole or well and sound. The word 'Yoga' means union with whom, i.e., 'who and 'whom' would be in union. The concept of Yoga has been well enunciated by Sage Patanjali in the Yoga *Sutras*. One of the *sutras* states thus:

*Athyoganushasanam (P.Y.S., 1.1)*  
*YogashchittavrittiNirodhah (P.Y.S., 1.2)*  
*Tada drashtuswarupeawasthanam (P.Y.S., 1.3)*

The *sutra* says a lot about the role of Yoga, how it affects, where it affects, and what be the outcome.

Yoga is a discipline in which you learn to rule over your subtle nature through training of mind and body; the training takes place in and on your mind and body, so that you can see and place you as the real you. Thus, Yoga expresses harmony with your own individual consciousness and nature. Its technique starts from the gross roots level, which is the physiological level. Physiological level can be further classified into inner/outer level and subtle level, one's mind comprises of thought, emotions, feeling and genetic, molecular level. The *sutra* also highlights the *Ashtanga Yoga (Yama, Niyama, Asana, Pranayama, Pratyahar, Dharna, Dhyana, Samadhi)*. The practice and adaptation of *Ashtanga Yoga* in one's life is helpful in removing '*Chittavrittis*' and *Vikshep* It gives a steady and calm mind, which is free from all kinds of '*Klishta*' and '*Alklish Vrittis*', which helps a person control, manage, and regulate his/her mind in the right way. The concept of '*Chittprasadnam*' in Yoga talks about how one can remain positive even in adverse situations by cultivating positive thoughts.

**Asthanga Yoga:** *Asthanga Yoga* is way to control the mind which is root cause of all psychosocial problems. *Asthanga Yoga* is basically focused upon the spiritual development, but it is also very relevant to attain holistic health. If *Asthanga Yoga* is adopted and follows properly in one's life then physical, intellectual, emotional, social and spiritual development and health of a person remain intact.

It consists of eight limbs; therefore, it is called and known as *Asthanga Yoga* (eight-limbed Yoga). The limbs of *Asthanga Yoga* are as follows *Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana* and *Samadhi*. These eight limbs have been further divided into two parts known as *Bahiranga Yoga* and *Antaranga Yoga*. *Bahiranga Yoga* consists of *Yama, Niyama, Asana, Pranayama* and *Pratyahara* while *Antaranga Yoga* consists of last three *Dharana, Dhyana* and *Samadhi*.



Eight Limbs of **Asthanga Yoga**

**Yama: Ahimsa-satya-asteya-brahmacarya-aparigraha-yama P.Y.S. 2.30**

*Yama* can be understood as code of social conduct and behavior. *Yama* focuses upon the socially appropriate behavior which is based upon moral ethics and values. That should be followed in our social life. Appropriate action and moral conduct leads social and emotional harmony. There are five *Yamas*: *Ahimsa* (non-violence), *Satya* (truth), *Asteya* (non-stealing), *Brahmacharya* (continence) and *Aparigraha* (non-accumulation). *Ahimsa* means non-violence action but it should not be in only action but should be in thoughts and words as well as. So, it is not only beneficial for others towards it are directed but also for one's self. *Satya* (truth) means truthfulness. It teaches honesty and truthfulness in our thoughts, speech, and action. *Asteya* indicates non-stealing. It means we should not snatch the thing from others which doesn't belong to self. Certainly it will not give happiness and joy. *Brahmacharya* means exercising control in our sexual behavior. *Aparigraha* means one should not accumulate or hoard things, wealth etc, which is not needed. Fear of uncertainty and insecurity always leads hoarding behavior or action.

We all agree that psycho-social problems are caused by our poor social conduct and skills. Where everyone becomes self-centered which is ruining our interpersonal relationship and our social support system. Adapting *Yamas* in our life leads to a peaceful social relation with others and self. It strengthens social and emotional development adequately. It leads a person towards a spiritual development.

**Niyama: Saucha-santosha-tapah-svadhyaya-isvara-pranidhana-niyama P.Y.S. 2.32**

*Niyama* literal means binding rules and observances or discipline. Five *niyamas* are: *Shaucha* (purity), *Santosha* (contentment), *Tapah* (austerity to discipline body mind), *Svadhyaya* (study of self by introspection and studying scriptures), and *Isvara-pranidhana* (surrender to God). *Niyama* can be viewed as observance of rules of personal life. *Shaucha* (purity) means cleanliness and purity from mind and body. Inner purity will get through recitation of mantras and prayer which remove all the negative thoughts and emotions like fear, anger, lust etc. Outer purity will be done by *Shatkarma* (six yogic cleansing practices) or bathing, brushing and cleaning all parts and organs of body. It implies the body should be clean and mind should be purified from all kind of dirt. *Santosha* is important virtue to maintain our inner peace. It means one should not desire more than he earned in his/her life. A person should be contented with what he/she has. This attitude will come from the practice of joyfulness and gratitude. It helps to reduce pain and suffering which is caused by greedy nature or dissatisfaction with life.

*Tapas* mean one should tolerate pain with good intention and continue their effort to reduce and overcome their pain in place of giving up or things. This is called *Tapas*. This attitude will come from fasting and practicing *Pranayama*. This *Tapas* helps to remove physical, emotional and thought related impurities, one becomes self-disciplined.

*Svadhyaya* (self -study or analysis) means study of self or knowing one's own existence. It can be known as deeper understanding and analysis of his/her problems by analysing our cause and behavior. It means develop true insight about yourself. In this way one can lead a stress free life.

*Isvara-pranidhana* (surrender to God) it means having deep faith in God or supreme power's existence even in adverse situation. This unconditional faith gives strength to a person to deal with any kind of problems and focus to perform desire less actions.

Person got courage to face any kind of problems if we follow *Yama* and *Niyamas* in own's life.

**Asana: Sthira-sukham-asanam P.Y.S. 2.46.**

*Asana* means correct posture and or seat. Sage Patanjali describes *Asana* as "*Sthira-sukhasanam*" a posture which is comfortable, stable and delightful. A person can achieve delightful posture after cultivating

*Yama* and *Niyama* within himself or herself. It regulates pranic flow in whole body and optimizes the functioning of all organs and systems of body. It gives strength, flexibilities and mobility to the body.

**Pranayama:** *Tasmin sati svasa-prasvasayor-gativicchedahpranayamah P.Y.S. 2.49*

Breath and mind affect each other. Practicing *Pranayama* (breathing practices) activates the pranic flow and activation of pranic flow improves the functioning of mind and makes it active. Therefore, stable Chitta can be achieved through *Pranayama*. It helps to activate the Parasympathetic nervous system, which plays significant role in emotion regulation. Regular practice of *Pranayama* balances the autonomic nervous system which gets disturbed in stressful situation. It is used to slow down negative emotion and maintain the peace of mind in adverse situation.

**Pratyahara:** *Sva-visaya-asamprayogecitta-svarupanukaraivendriyanam pratyaharah P.Y.S. 2.54*

It means the withdrawal of senses from their respective external object. It comes after *Pranayama* when a person is able to regulate his/her breathing then he/she should learn to control the senses and make it inward. Our senses play an important role in our mental state because when we make any impression or view on the basis of the information which is received by our senses, that impression leads certain emotion and our chitta or mind gets disturbed. So, key to maintain tranquillity is to achieve *Pratyahara*. Therefore we need to withdraw our senses from worldly things for controlling our mind and protect ourself from emotional turbulences. Our senses follow the mind so by controlling the senses, mind can be controlled/stablized. *Pratyahara* can be achieved by self-analysis and introspection which leads journey inwards from outward.

**Dharana:** *Desabandhas-cittasyadharana P.Y.S. 3.1*

After achieving the *Pratyahara*, *Dharna* comes next. *Dharana* means controlling or focusing the mind on single point. It is an important tool to for the purification of mind and achieving *Chittashuddhi*. After *Dharana* a person can move towards *Dhyana*. It leads towards emotional, intellectual and spiritual development.

**Dhyana:** *Tatrapratyayaikatanatadhyanam P.Y.S. 3.2*

It is uninterrupted flow of awareness towards the object of contemplation. Prolonged *Dharna* leads a person towards *Dhyana*. At this stage, a person has a stable mind and *Chittashudhdi* is achieved. This also leads a person towards spiritual development.

**Samadhi:** *Tadevarthamatra-nirbhasamsvarupa-sunyamivasamadhih P.Y.S. 3.3*

*Samadhi* is when the distinction between subject & object has been removed. An individual reaches at a stage of blissfulness and inner peace. *Samadhi* is state of self-realization.

Patanjali Yoga Sutra teaches to manage our thoughts, feelings and emotions in regulatory and balanced manner so that to integrate inner and outer life in meaningful and contented way. It helps to lead a conscious life.

*Asana* work on the body (outer physiology) and enhance its strength, endurance, and flexibility; practising them regularly will help build a strong, sculptured, and healthy body, internally and externally. A healthy body sprouts from one's inner body organs and these organs bud from one's endocrine system; the endocrine system is delicate in nature and its health relies upon a healthy mind. The flow chart given below depicts the ecosystem of a living being (Figure 2).

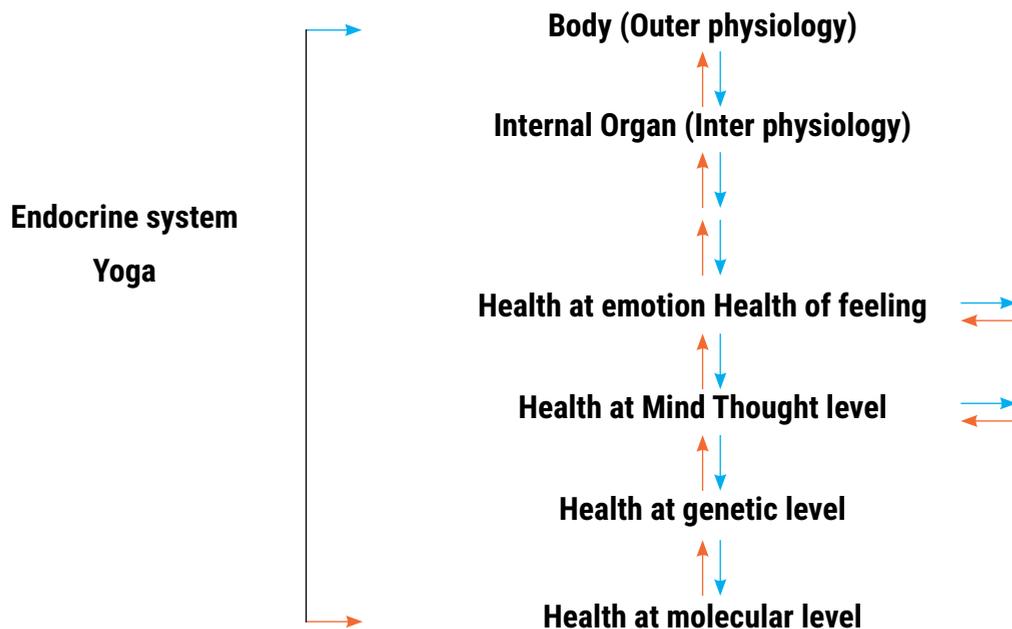


Figure 2. Flow chart that shows the ecosystem of a living being

Yoga clearly accepts the interdependence of mind, body and soul; in fact it says that change of mind can change the experience of life. It shows the path of changing the pattern of thoughts. By changing the pattern of thoughts maintain the tranquillity through energy source which is come within person.

These days people are concerned about mental health and they discuss ways and means to keep it healthy. In this context, the *Bhagvad Gita* gives comprehensive explanation of several types of Yoga to gain strength of mind and eradicate the miseries of life, which will help attain constant bliss. According to *Bhagvad Gita* one should renounce the weakness and face the entire situation with a brave heart. To acquire this, *Bhagvad Gita* gives three dominant types of Yoga: *Jnana* Yoga, *Bhakti* Yoga, and *Karma* Yoga.

**Jnana Yoga:** According to *Jnana* Yoga, one should know the truth of life. If one knows the reality of self, then there will be no further pain, sorrow, and suffering. One can attain purity of mind, calmness, blissfulness by means of attaining true knowledge about oneself. True, valid, reliable, and authentic knowledge always produces rational thoughts and beliefs and the false knowledge gives ambiguity and confusion or cloudiness of thoughts and mind. It affects cognitive functions (judgment, reasoning, thought, etc.) and behavior. A person's mind, feeling, and actions will be intact when he/she has good understanding about his/her weaknesses and strengths. There should be complete acceptance of such strengths and weaknesses, rather than denial, so that an individual can maximise his/her overall potential that promotes positive mental health and well-being.

**Bhakti Yoga:** The first requisite condition for *Bhakti* Yoga is the profound and deep yearning for the God (supreme divine). The second significant value required is *Shraddha*, which can be understood as highest respect, devotion, and admiration for human being or God. *Karuna* or compassion for all living beings in the whole world is the third attribute. If a person's mind is full of dedication, loyalty, and unconditional love, then faith fills his/her heart or soul with positive energy, thoughts, and emotions. Thought is a powerful instrument, which is a product of mind; it directs and shape sour emotions in the same way. Regular practice of *Bhakti* Yoga can help one to acquire this virtue and traits as well as to keep the mind healthy and calm.

**Karma Yoga:** Karma Yoga is also known as the path of righteous action, duty, and obligation to perform to the best of one's capacity. In this path, focus must be on work performance rather than the outcome. The undivided attention towards work processes gives perfection to one's skill and one can live in the present moment. This approach towards work gives one a strong mind and happiness. This skill is referred to as *Karamsu Kaushalam*; performing one's duty with full efficiency will help to alleviate anxiety, stress, and other mental issues. When a person performs his/her work with honesty and perfection, he/she gets satisfaction and peace. Engaging our self or mind in productive work is a remedy to keep one's mind healthy and active. A person who does that would never feel low or, dull, and would also be able to beat his/her laziness. But when an individual performs his/her duty only for favourable/desired outcome, he or she increases the stress level and hamper the nature, quality and productivity of the work itself. It disturbs attention and concentration of the person. Therefore, the key to fitness is to work efficiently with full dedication without any attachment or desire.

*Stthitpragya* (stability of mind) and *Paranayama* are two other major concepts of Yoga to maintain and restore the balance of mind and body. *Stthitpragya* is a virtue, the lack of which gives developmental illness. In this condition, a person feels fear, anxiety, stress, paranoia, dullness, and low mood. A person can regain or maintain *Stthitpragya* by practising three types of yoga: *Pranayama*, lifestyle management, and by believing in self rather than having false expectations from others. Similar principle and knowledge are also used in systematised cognitive behavior therapy quite successfully in the treatment of depression or stress. Benefits of *Pranayama* are already established in various research studies. It is helpful in maintaining the physiological and psychological equilibriums and harmony. Stress disturbs this equation, causing mental health problems.

Till a few decades ago, the knowledge of Yoga was not so well known and it was limited to a few people. Things have changed in recent years and now Yoga is becoming popular among the common masses.

Advancements in science have brought about a lot of changes in the lifestyle of people. At the same time, this altered lifestyle, characterised by laziness and misuse of technology, is also contributing to stress and lifestyle-related problems. There are number of diseases that come under the roof of lifestyle disorders. As disease means 'not at ease', if it occurs in the body then the body will not be at ease. In the same way, if it transpires in the mind, then the mind will not be at ease. Here, Yoga comes as saviour and works as adjunct therapy or main treatment mode.

There are numerous diseases –e.g., hypertension, coronary heart disease, anxiety disorders, phobia, stress, depression, increasing memory, attention and concentration, hyperactivity, personality growth, OCD, obesity, schizophrenia, mood disorder, and conduct disorders –where Yoga acts as a prevention tool by enhancing the health of mind and body. There are many useful techniques or methods in Yoga, which have proven to be helpful and useful in treating psychological problems. It refines all aspects and dimensions of a person (cognitive, emotional, etc.). Regular practice of Yoga normalises and balances the excess hormones and relaxes the body. It is also helpful in controlling the stress hormones and increasing oxytocin (happy hormone) by regulating the HPA (hypothalamus–pituitary–adrenal) axis.

Yoga is also found effective in increasing the markers of brain plasticity such as brain-derived neurotropic factors. Chanting *Mantras* and *Shlokas* has also brought evidence-based favourable changes in the mind and body at functional and structural levels. This has been used as alternative therapy in many psychological disorders. There is ample evidence and studies that found Yoga effective and promising in treating psychological disorders of a child, adolescents, and adult. By practising Yoga, people in the older age group are equally benefitted through improved memory, mood, and psychomotor functions, without having any side effects. Therefore, opting Yoga as adjunct therapy is encouraged and practised for the

past many years. In some cases, Yoga is even used as the first line of treatment method. Given below are some of the major Yogic methods that promote good mental health.

**Yoga nidra:** *Yoga nidra* is a time-tested technique through which one gets profound rest at physical, emotional, and mental levels. In this, a person consciously uses the awareness to relax every part of the body with receptiveness of positive resolution; it encompasses breathing, feeling, visualisation, and positive resolution. This ultimately leads to a deep state of relaxation. It is helpful in alleviating physical and mental fatigues, stress, and rigidity. It increases positivity, clarity, and calmness. Studies show that the longer and regular practice of *Yoga nidra* generates the alpha waves in the brain, which is responsible for relaxation. This technique is found quite effective in various psychological illnesses such as sleep disorder, anxiety, stress, psychosomatic disease, phobia, and OCD. A neuroscience research in 2002, at Copenhagen states that *Yoga nidra* practice increase the secretion of dopamine by 65%. This is helpful in lifting the mood and enhancing positive emotions.

**Yogasanas:** The word 'asana' means stable or firm pose. There are many *Asanas* like '*Suryanamaskar*', '*Yoga Vinyasa*', '*Shashank Bhujangasana*', '*Chandranamaskar*', '*Pawan Muktasana*' etc. *Yogasanas* are mainly categorised into six broader classes: (1) *Sukshma*, (2) *Sthula*, (3) Sitting, (4) Standing, (5) Prone, (6) Lying. *Asanas* make the body flexible by increasing the blood circulation, toning the muscles, tissues, etc.; they also revive and strengthen all the systems, including muscular skeleton system, along with detoxifying the whole body. In this way, *Asanas* develop and maintain the mind-body harmony, improve sleep, reduce anxiety and stress, and improve the brain functions. Regular practice of *yogasanas* is now understood as key to good health and longevity. This is helpful in improving the quality of life too. '*Sarvangasana*' (shoulder stand), '*Setubandhasana*' (bridge pose), '*Bhujangasana*' (cobra pose), '*Mandukasana*', '*Ardhmatsyendrasana*', '*Balasana*', '*Sukshamavyayama*' have brought changes at the functional level of brain and body in desired ways. Several research studies have validated this aspect. Yoga can set right any imbalance of hormones and neurotransmitters in the brain. Sitting, standing, and lying *Asanas*, '*Trikonasana*', '*Halasana*', '*Makarasana*', '*Gomukhasana*', '*Shavasana*', and '*Suryanamaskara*' are used to reduce anxiety, depression, and stress and also to improve mood.

**Pranayama:** '*Pranayama* is composed of two words, '*Pranasya*' and '*Aayamah*'. *Pranasya* is for *Prana* and '*Aayamah*' means regulation of amplitude. Regulation of *prana* (breath and vital energy or Pranic energy) is necessary for the survival of life; this makes a person healthy and well. All organic functions are regulated by *Prana*, including contraction and expansion of heart, blood flow in vessels, inhalation and exhalation, digestion of food, excretion of toxins, and even powerful mind and brain also. It also regularises the flow and maintains equilibrium of energy and *Prana* in our '*Koshas*'. This also energises the different types of *Prana* in our mind and body. It brings balance in the autonomic nervous system, including parasympathetic and sympathetic nervous system. This is usually disturbed and imbalanced in neurotic disorders such as anxiety, depression, OCD, phobia, dissociative, ADHD, and stress. Positive thoughts are also generated in place of negative ones due to changes in brain activity. In all, it is not difficult to interpret that yoga practices rejuvenate our mind and body.

There are many techniques of *Pranayama* such as '*Anuloma-Viloma*', '*Nadishodhana Pranayama*', '*Bhramari Pranayama*', '*Ujjayi Pranayama*'; all these are effective in restoring health. *Pranayama* increases the level of oxygen in every cell of the body and brain, which purifies the whole physiological and psychological systems of the human body. According to studies, serotonin and dopamine are also increased by practice of *yogasanas*.

**Meditation:** Meditation has always been considered as a promising technique for both healthy and unhealthy people. If healthy person practises regularly, then his/her health will be maintained. Meditation is always recommended and used in many psychological disorders, from children to older age groups.



There are various forms of meditations, but all of them give almost the same result. Its benefits depend upon the sincerity and regularity of the practitioner. Meditation reverses those functions and damages caused by stress. It works on both psychological and physiological levels. Many studies have proven that meditation is helpful in maintaining the harmony through regulating the central nervous system, HPA axis, glutamate receptors (increase oxytocin), cortisol balance, serotonin, and levels of GABA receptors. These physiological changes induce emotional and behavioral changes reduce the anxiety, and control the mind at pointedness. It is a known fact that stress is a subjective phenomenon and handling stress depends upon individual perception about the event and how it is appraised and interpreted. Tolerance and patience levels are also increased and remain steady under unfavourable and stressful conditions. Thus, this changes the perception and pattern of thoughts towards stressor and start thinking from different angles or perspectives.

It is common knowledge that a relaxed mind and body works fast and efficiently under any circumstances. It has been supported by many previous studies that practice of meditation for longer duration brings the changes in brain wave pattern too. It replaces the excess of beta waves with alpha and theta generation. This is generated in a state of deep relaxation and creativity. Functional and structural changes are also found like the volume of brain, grey matter, cortical thickness, amygdala, increased supply of oxygen and blood flow in the brain, and thickness in hippocampus. This has direct effect on cognitive functions like thinking, learning, memory, reasoning, problem solving, and emotion regulation. Meditation can also be helpful to minimise the effect of traumatic events happened in life and in de-addiction, anger management, and mental illness. Effect of meditation in depression is equivalent to the effect of antidepressant, so meditation can be used as alternative medicine too.

In meditation, we take charge of our awareness, thoughts, and breath, through that we conserve energy and feel more energetic with a positive mental attitude. A study shows that meditation affects the telomere (a cap of chromosomes, which look like shoe laces top; it is like aging clock of body) length; telomere length shortens with increasing age or due to stress. Consistent practice of meditation can slow down the wear and tear of telomere length, which slows down the ageing process too.

**Yogic Counselling:** When people suffer and feel helpless, they seek advice or counselling. The following shloka in Bhagwad Gita (B.G.) brings out the importance of counselling:

evamuktavarjunahsakhyerathopasthaupvishat  
Visriyeshasharamchapamshokasamvignamanasah (B.G. ,1.47)

The above shloka gives the picture of a man who is reluctant to face situation, grief stricken, distressed, perplexed, full of tears, sentimental, indecisive, and sad.

Nashtmohahsmritilabdhatvatprasadanmayachuyata  
Sthitosmigatsandehahkarishyevachanamtava (B.G. , 18.73)

In this above shloka, Arjuna said that 'By your grace, my illusion has been dispelled, and I am situated in knowledge. I am now free from doubts, and I shall act according to your instructions'.

In fuzzy situation, or at a time of having a vague mindset, yogic counselling can help to get a clear picture and remove the confusions. Yoga states that bliss is one's own core element; if one is not experiencing it, there might be an imbalance in thought pattern, attitude, and lifestyle. Due to lack of awareness and ignorance also, one is unable to connect with the core element of bliss/ultimate peace. Yoga gives emphasis on controlling one's own senses and mind and be proactive rather than reactive to the situation. One who is free from greed, possessiveness, remain the same in favourable and unfavourable conditions can experience bliss. This Yoga is based on the principles of *Yama* (*Satya, Ahimsa, Asteya, Aparigrah,*

*Brahmacharya*) and *Niyam* (*Saucha, Santosh, Swadhyaya, Ishwarpranidhan*). *Yama* cultivates social and ethical value system in a person by implanting the seeds of five yamas, which are useful in reducing those mental afflictions caused by social and adjustment, relationship issues or self- disintegration and other. *Niyama* is used in cleaning the mind and body by applying four *niyamas*. Dissatisfaction, conduct-related problems, anger, impure thoughts, greed, lack of self-analysis/self-introspection or mistrust traits are indicators of poor mental health. Removing and changing these traits by adapting *Yama* and *Niyam* in our life will improve the quality of life and wellness. This increases self-satisfaction too.

In today's world, most health problems are caused by a faulty lifestyle and emotional complexities; for example; stress, anxiety, obesity, diabetes, etc. A healthy yogic lifestyle with proper '*Achar*' (right conduct), '*Vihar*' (recreation), '*Vichar*' (positive thoughts), and '*Ahara*' (right food) will not only reduce psychological problems but also physiological problems.

*Ayurveda* and *Bhagvad Gita* have also mentioned about the timing, type ('*Satvic*', '*Rajasic*', '*Tamsic*'), nature, and '*bhava*' of eating food have significant effect on our physical and mental health. The mind-body is so interconnected that a problem in one part affects the other too. A healthy lifestyle improves the chance of recovery of neurotic and psychotics illnesses; and if a healthy person follows a healthy lifestyle, then it decreases the chance of getting mentally unfit. In gist, Yoga advocates a way of life that stresses on balance diet, balance recreation, balanced desire towards work, balanced sleep, and by practising yogic *kriyas*.

### Yogic Way of life:

Yoga gives a balance way of life where right behavior, eating habits, thinking, recreational means and conduct are highlighted. If a person adopts this way of life then his physical and personal health will be promoted. There are five components of yogic way of life:

- *Ahara* (Food)
- *Vihara* (Activity)
- *Achara* (Conduct)
- *Vichara* (Thinking)
- *Vyavahara* (Behavior or actions)

### Ahara (Food)

The *Ahara* principle is related to types of food and its consumption. Yoga also emphasizes on *Mitahara*, which is related to quality and quantity of food along with the mood and *bhava* during intake of food. The state of mind should be positive while eating the food. If someone is eating food while watching T.V or doing something else or in negative mood then just swallow the food. It may have poor effect upon the digestive system and health. *Mitahara* always advocates positive state of mind during intake of food. According to Yoga, food should be freshly cooked without losing the nourishment of foods and should contain with nutrition. Quantity of food is also mentioned very clearly that two quarters of the stomach should be filled with food and remaining one quarter of stomach should be filled with water and left empty for air or *vayu*.

### Vihara (Activity)

*Vihara* means relaxation. A person should engage himself/ herself in those activities or exercises which give relaxation and refresh the mind and body like, music, sports, painting, cooking, etc. These activities help to channelize and regulate the emotions and bring harmony and peace of mind. Other yogic practices

like *Asanas*, *Pranayama* and meditation also help to relax mind-body too. One should always follow a routine properly in his/her life to maintain the tranquillity.

### Acharya (Conduct)

*Acharya* includes the behaviour, attitude, emotions, desire etc. Right behaviour plays an important role in our life. It helps to alleviate the psychosocial problems. Positive attitude, good habits, disciplined and regulated behavior, and controlled desires make a person emotional and socially strong. It protects us from any unwanted stress. Therefore we should always monitor and evaluate our behavior towards self and others and put effort to correct wrong conduct. This is an essential key for problem free or stress free life. Yoga always focuses upon positive attitude and behavior through adapting *Yama* (restraint) and *Niyama* (observance) in life which helps to develop control on desires and emotions.

### Vichara (Thinking)

We always know that thought is very powerful tool of mind and a single thought can change attitude, behavior and feeling towards self and others. Nature and intensity of thought both play pivotal role in maintaining the balance between mind and body. A positive thought makes a person optimistic in his/her life and gives energy to move towards desired goal. It also gives strength to combat with any kind of stressor. We all know that a positive thought brings happiness and a negative thought brings unhappiness. It works as prevention and management for mental health related problems. Yogic practices like *Pratyahara*, and *Dhyana* (meditation) help us in controlling our thoughts and thereby promoting optimism in life.

### Vyavahara (Behavior or Action)

*Vyavahara* is the outcome of *Ahara*, *Vihara*, *Acharya* and *Vichara*. According to Yoga Philosophy our action or *Karma* should be right. We should not indulge in wrong activities which lead to pain and suffering in our life. We should always perform *Karma* without desire or expectation that is called selfless work. It is also mentioned about the work with full dedication in our *Karma* yoga. This is ultimate key for positive mental health and stress free life.

### Bandha and Mudra

Mind-body harmony, reduced stress levels, increased concentration, and learning can be maintained by specific *Bandha* and *Mudra*. Specific attitudes and postures during the practice of *Mudras* have a direct association with *Annamaya kosha*, the physical body; *Manomaya kosha*, the mental body; and *Pranamaya kosha*, the pranic body. A person practising bandhas and mudras gets a complete understanding of the flow of *prana* in the body.

Science explains those mudras changes the conscious and unconscious impulse and reaction and along with it bring about changes in the habitual pattern or basic trait originated from the brain. Each and every *Bandha* and *Mudra* will perform with holding and locking the breath in a particular area or body part. This regulates and normalises the function of glands, hormones, central nervous system, and brain. *Prana Vayu* and *Apan Vayu Mudra* is found effective in overcoming anxiety and stress. *Jalandhar Bandha* is helpful in regulating emotional deregulation (tension, anxiety, etc.) and bringing positive changes.

### Treatment of Psychological Disorders through Yoga Practices

We will consider a few disorders and the yogic practices that are useful to prevent/cure them.

#### (a) Heart attack

High fat food, non-vegetarian diet, lack of fruits/vegetables in the diet, lack of exercise, obesity, excessive stress, and tobacco consumption are the most common causes of heart blocks, which

are basically deposits of cholesterol and triglycerides. Prevention of heart attack lies in avoiding fatty foods and non-vegetarian foods and consuming a lot of fruits and vegetables. Yogic *Asanas*, *pranayama*, meditation, and other physical exercises can also aid in the prevention of heart attacks.

### (b) Hypertension

A Type 'A' personality with excessive drive, aggressiveness, and ambition may be more liable to have hypertension as compared to a Type 'B' personality with opposite features. Amongst various yogic measures, the practice of "*shavasana*" (a Yogic relaxation posture) is found to be of much use not only as a curative measure, but also as a measure for preventing the development of hypertension.

### (c) Bronchial asthma

Bronchial asthma is a common disease in which person gets attacks of difficulty in breathing. He/ She feels greater difficulty in exhalation than in inhalation. The duration of attack may vary from patient to patient. Three main causes are (a) infection of the respiratory passage, (b) respiratory allergy to certain specific allergens, and (c) psycho-physiologic reactions to stressful life situations.

Yoga therapy in the form of both postural exercises (*Asanas*) and breathing exercises are good for such patients. The recommended *Asanas* are '*Shirshasana*', '*Chakrasana*', '*Matsyasana*', '*Bhujangasana*', '*Matsyendrasana*', and '*Sarvangasana*'. The recommended *pranayama* are '*Ujjayi*', '*Shitali*', and '*Bhastrika*'. Recommended *kriyas* are '*Dhauti*', '*Neti*', '*Kapalabhati*', '*Nauli*', and '*Uddiyan Bandha*'.

### (d) Chronic Peptic Ulcer

Many researchers have found that stress is considered as the cause of peptic ulcer. It is a psychosomatic disorder as ulcer arises only in individuals who are frustrated both in their strivings for attention and love in their family and success in their work.

The recommended *Asanas* are '*Mayurasana*', '*Sarvangasana*', '*Matsyasana*', and '*Shalabhasana*'. The *kriyas* '*Nauli*' and '*Uddiyan*' are also recommended. '*Sitali pranayam*' is good for such patients.

### (e) Stress-related disorders

Yoga plays a pivotal role in managing stress and its related problems. *Yogasana*, meditation, and *pranayama* are helpful in alleviating stress and maintain homeostasis in physical and mental health. '*Shavasana*', '*Yoganidra*' '*Pranayama*' are very helpful. These *Asanas* will increase the tolerance level and maintain the peace of mind by bringing in patho-physiological changes.

## 09 EVIDENCE-BASED RESEARCH ON YOGA FOR MENTAL HEALTH

Recent research studies have shown that Yoga can be used to improve mental health. A few such important research studies are briefly discussed below.

In 2010, Harner, Hanlon, and Garfinkel conducted a research study on incarcerated women (women in prison) to evaluate the efficacy of Yoga. The study used linear mixed effects models to examine statistically significant changes in mental health. A group format of Iyengar Yoga Programme for two sessions a week for 12 weeks was used for intervention. Data on baseline, 4th week, and 12th week were collected. Findings of this study have shown a significant improvement in depression symptoms, anxiety symptoms, and perceived stress among incarcerated women. This study indicated Yoga may be used to improve future interventions focusing on the health outcomes of incarcerated women.

Gururaja *et al.* conducted a study in 2011, to evaluate and compare the effect of Yoga on the mental health status of younger and older peoples in Japan. Individuals selected for this study were administered a 90-min of yoga class for once or twice a week for a month. Salivary amylase activity was assessed before and after the yoga practice. State Trait Anxiety Inventory (STAI) was administered on baseline and after one month to assess state anxiety and trait anxiety. Research findings show that the salivary amylase activity decreased in both senior and younger groups and also decrease in the state anxiety score; changes were statistically significant with  $P < 0.05$ . The study shows that Yoga helps to improve the mental health in both old and young age groups.

Fanand Chen (2011), conducted a research study to evaluate the effect of Yoga in the mental health of elderly people with dementia. The group that went through Yoga therapy showed better physical and mental health as compared to the non-Yoga group. The depression rate and behavioral problem also reduced significantly. Other benefits found were reduced blood pressure, improved respiration rate, increased cardiopulmonary fitness, improved body flexibility, balance, muscle strength, endurance, and increased joints motion.

Telles, Singh, and Balkrishna (2012), did a review-based study to assess the use of Yoga in the management of mental conditions such as trauma-related depression, anxiety, PTSD, and physiological stress due to exposure to natural calamities, war, interpersonal violence, and incarceration in a correctional facility. In this review, 11 studies have been published and indexed in PubMed. Review says that though Yoga and other mind-body interventions appear to be useful in reducing mental health disorders following trauma, it needs future studies with more sample sizes.

A research review conducted by Büssing *et al.* has summarised the current evidence of Yoga intervention on various components of both physical health and mental health. Meta-analyses on several randomised clinical trials (RCTs) have shown quite high beneficial effects of Yoga for pain-associated disability and mental health. They state while Yoga may be effective as a supportive adjunct to other treatment modalities, there is a need for more research studies with larger samples.

Khalsa *et al.* conducted a research study to evaluate the potential mental health benefits of Yoga for adolescents in secondary school. Completed baseline and end-programme self-report measures of mood, anxiety, perceived stress, resilience, and other mental health variables were collected. Independent evaluation of outcome measures shows that yoga participants have statistically significant differences in controls on measures of anger and fatigue/inertia. Most outcome measures have shown a pattern of

worsening condition in the control group, whereas the same conditions in the Yoga group were either minimal or showed slight improvements. These preliminary results suggest that implementation of Yoga is acceptable and feasible at a school level and Yoga has a potential role in preventing and maintaining mental health.

Clark and *et al.* conducted a research study (feasibility test) to evaluate the use of Yoga as a group therapy for female victims of partner violence with symptoms of anxiety, depression, and post-traumatic stress disorder (PTSD). 12-week trauma-sensitive Yoga intervention with psychotherapy was administered once weekly for 30–40 min at the end of each group therapy session. The control group underwent only psychotherapy. Significant changes were seen in the Yoga group, especially in primary outcomes such as anxiety, depression, and PTSD symptoms. This feasibility test shows promising signs on using Yoga as an adjunctive treatment for a number of mental health conditions and also suggests that it is an effective tool for partner violence survivors seeking group therapy.

Lin *et al.* (2015), conducted a randomised control trial to examine the effect of yoga on work-related stress and autonomic nerve activity in mental health professionals. Yoga was used as an intervention for 12 weeks; work-related stress and stress adaptation were assessed before and after the yoga session; heart rate variability was measured at baseline and post-intervention. Results show that mental health professionals in the Yoga group experienced a significant reduction in work-related stress and also a significant enhancement of stress adaptation when compared to the control group without yoga intervention.

Sathyanarayanan *et al.* conducted a research review to see the role of yoga and mindfulness in severe mental illnesses and found that yoga and mindfulness interventions appear to be useful as an adjunct in the treatment of severe mental illnesses, including schizophrenia, major depressive disorder (MDD), and bipolar disorder (BD). Studies have shown improvements in psychopathology, anxiety, cognition, and functioning of patients with schizophrenia. They found that *Asanas* and pranayama are the most commonly studied forms of Yoga for schizophrenia. These studies found a reduction in general psychopathology ratings and an improvement in cognition and functioning. Some studies also found modest benefits in negative and positive symptoms. Mindfulness has not been extensively tried, but the available evidence has shown benefits in improving psychotic symptoms, improving the level of functioning, and affecting regulation. In MDD, both Yoga and mindfulness have demonstrated significant benefit in reducing the severity of depressive symptoms. There is sparse data with respect to BD. However, more rigorously designed and larger trials may be necessary, specifically for BD.



## 10 CONCLUSION

Yoga can bring harmony in mind-body functioning. Yoga has been conceived as plural in its composition, meanings and practices (i.e., *Hathayoga*- Physical Yoga, *Gyan Yoga* - Knowledge Yoga, *Bhakti Yoga*- Emotional Yoga, *Raj Yoga*-Mental Yoga, *Layayoga*- Meditation Yoga) with singularity in its' objective to promote mind-body fitness. In contemporary times, *Hatha Yoga* (Physical Yoga) is getting further diversified into different styles. Deeper understanding of these forms of yoga reveals that certain components including ethical and moral principles, posture (*Asana*), breathe regulation (*Pranayama*), chanting particular sounds (*Mantra*), introspection (*Pratyahar*), contemplation (*Dharana*) and meditation (*Dhyan*) are common among these.

Yoga can empower individuals' positively to take charge of their own psychological wellness and save a large expenditure for treatment and prevention of mental health problems. Yoga can take the form of a new therapy for curative, preventive, protective and promotive objectives at schools, hospitals, health care centres and in family. Yoga is a way of life and this helps to an individual to live a life in right way, aim is to bring mind-body in harmony and leads to path on peace and happiness.

Yoga is the comprehensive life science that provides a spiritual and pedagogical insight into the body, mind and emotional state of the individuals and thus mankind as a whole. Yoga, through centuries, has bestowed upon the Indian culture, numerous healing techniques for all aspects of human life. The paths and life approaches suggested by Yoga pertaining to food choices, daily activities/practices, and frame of mind in general, helps in strengthening the physical health and in developing a healthy mindset. This is primarily attained by managing stress. The best way to manage stress is to identify and assimilate it, manage the response towards it and if possible, nullify its negative effects through spiritual approaches. Yoga is a way of living life. One must keep in mind that Yoga is what we practice, the choices we make for ourselves throughout our entire life. Those choices and practices define the quality of life up until the last day of it. Yoga is not a one-time event but is rather a perennial process that goes on for as long as we are alive. It lays emphasis on the age-old thought, that it's the journey that counts and when the journey is worthy the yearning for achieving the goal becomes immaterial. Having underlined the importance of Yoga, it is important to understand that Yoga is not the equivalent of body-bending or the modern-day workout regimes, rather it helps us synchronize with our inner and deeper selves. It in-syncs us with our conscious, enlightens us intellectually and manifests in front of us, paths that let us connect ourselves to our cultural teachings and *Dharma*. Yoga does this by imparting us multi-dimensional viewpoint and therefore assisting us in making the right choices when life does not seem to go our way. In coping times, Yoga enables us to achieve a mindset where we are able to take a step back in order to understand our problems better with a healthy, calm and open mind and consequently handle them more efficiently. This way of managing life adds up to our physical health as well. Yoga and its numerous benefits can be derived through a healthy diet, *Pranayama* and *yogasanas*. Through its prolific benefits and approaches, Yoga enhances the functioning of overall body and mind and imparts us with a healthy and positive outlook towards life. This has made Yoga a very important and useful technique in dealing with Physiological and Psychiatric issues. These claims have been supported by multitudinous scientific studies and research over the recent years.

## 11 | YOGA PROTOCOL FOR MENTAL HEALTH

S. No.	Yoga practices	Rounds	Duration
1.	<b>Prayer</b>		1 minute
2.	<b>Shat Kriyas</b>		10 minutes*
	i. Jal Neti		
	ii. Sutra Neti		
3.	<b>Yogic Sukshma Vyayama (Micro Circulation Practice)</b>		12 minutes
	<b>a. Neck Movements</b>		
	i. Forward and backward bending	3 rounds	
	ii. Right and left bending	3 rounds	
	iii. Right and left twisting	3 rounds	
	iv. Neck rotation (clock and anti-clock wise)	3 rounds	
	<b>b. Shoulder Movements</b>		
	i. Shoulder stretch	3 rounds	
	ii. Shoulder rotation (forward and backward)	3 rounds	
	<b>c. Trunk Movement</b>		
	Trunk twisting (Kati ShaktiVikasak)	3 rounds	
	<b>d. Knee movement</b>	5 rounds	
	<b>e. Ankle Movement</b>		
	i. Ankle stretch	5 rounds	
	ii. Ankle rotation	5 rounds	
4.	<b>Yogic Sthula Vyayama</b>		
	i. Rekha Gati	3 rounds	
	ii. Urdhva Gati	3 rounds	
	iii. Sarvangapusti	3 rounds	
5.	<b>Suryanamaskar (with focus on breath)</b>	3 rounds	5 minutes
6.	<b>Yogasanas</b>		
	<b>i. Standing Postures</b>		
	• Tadasana		
	• Vrikshasana		
	• Kati Chakrasana		
	<b>ii. Sitting Postures</b>		20 minutes
	• Paschimottanasana		
	• Ushtrasana		
	• Shashankasana		
	• Vakrasana		
	• Gomukhasana		

	<b>iii. Prone Postures</b>		
	• Makarasana		
	• Bhujangasana		
	<b>iv. Supine Postures</b>		
	• Ardha Halasana		
	• Sarvangasana		
	• Matsyasana		
	• Sethubandhasana		
	• Pawana Muktasana		
	• Shavasana		
<b>7.</b>	<b>Kapalabhati</b>	(30 strokes) Gradually increase 60 strokes	1 minute
<b>8.</b>	<b>Pranayama</b>		9 minutes
	i. Nadi Shodhana or Anuloma-Vinuloma	3 rounds	
	ii. Bhramari	3 rounds	
	iii. Ujjayi	3 rounds	
<b>9.</b>	<b>Dhyana</b>		5 minutes
<b>10.</b>	<b>Shanti Patha</b>		1 minute
	<b>Total:</b>		<b>60 minutes</b>

**\*Note:** The practice needs proper supervision and guidance in order to avoid any unwanted consequences.



## GUIDELINES FOR YOGA PRACTICES

For practising *Asanas*, Yoga practitioners should follow the principles given below.

### Before

- For performing *Asanas*, *Shauch* (cleanliness) must be maintained. It means that the body and mind should be clean. This also includes cleanliness of surroundings. Yogic practices should be performed in a clean and airy place with a clean body and mind.
- *Asanas* should be practised preferably in the early morning before sunrise or within two hours after sunrise. They could also be practised in the evening but with less benefit.
- *Asanas* should be practised on an empty stomach. At least a gap of three to four hours after a full meal and two hours after a light refreshment should be maintained.
- The bowel and bladder should be empty before performing *Asanas*.
- *Asanas* should be practised in a well-ventilated place which is free from dust, smoke, bad odour or too much wind.
- *Asanas* should be practised on an even ground. A carpet, folded blanket or a mattress should be spread on the ground to practise comfortably.
- *Asanas*, if practised after taking bath, become easier because bath promotes uniform blood circulation throughout the body and facilitates the practice of *Asanas*.
- Loose, light, and comfortable clothes should be worn while practising *Asanas*. Cotton clothes are preferable. Spectacles and wristwatch should be removed before the practice.
- Moderate food (*Mitahara*) is advised for better results. Oily and spicy food, smoking, and drinking liquor should be avoided.

### During

- ✓ While doing *Asanas*, always breathe through the nose unless specifically told to do otherwise. Try to coordinate the breath with body movements.
- ✓ *Asanas* should be performed slowly and gradually; move step by step into the final pose.
- ✓ Body movements during *Asanas* should be smooth. Jerks, force, and/or pressure should be avoided.
- ✓ *Asanas* should be practised with utmost awareness to bring harmony among the physical, *pranc*, mental, and spiritual levels.
- ✓ *Shavasana* should be performed after the practice session. It will remove fatigue and relax the mind and body. *Shavasana* can also be done in the middle of the practice session if the individual gets tired.
- ✓ *Asanas* may be practised by people of all age groups as per their capacity or as advised by the Yoga experts. *Asanas* should not be practised beyond one's capacity.
- ✓ People with fractured bones or who are suffering from chronic ailments/diseases such as stomach ulcer, tuberculosis, hernia, and high blood pressure and those recuperating from operations must avoid strenuous *Asanas*. Before commencing *Asanas*, they should consult a Yoga therapist or a doctor and should follow his or her instructions.



- ✓ The practice of *Asanas* should be discontinued immediately if there is severe pain in any part of the body.

### After

- Bath may be taken only after 15–30 minutes of the Yoga session.
- Food should not be taken immediately after performing *Asanas*. Light food may be taken only after 15–30 minutes of the yoga session.
- Yoga session should end with the prayer and *Shanti path*.

**It is always advisable for a beginner to practise *Yogasanas* under the guidance of a competent and qualified Yoga teacher. People suffering from any ailments should essentially consult Yoga expert before starting any practice.**



## 12 YOGA PRACTICES



### 1. PRAYER

संगच्छध्वंसंवदध्वं  
संवोमनांसिजानताम्  
देवाभागंयथापूर्वे  
सञ्जानानाउपासते ॥ ऋ.वे.10.191.2

saṃ-gaccha-dhwaṃ saṃ-vada-dhwaṃ  
saṃ vo manāṃsi janatam  
deva bhagaṃ yatha purve  
sañ-jana-na upasate ॥ R.V.10.191.2

**Meaning:** May our actions, words, and thoughts be beneficial to each other, as were our ancestors, so that there may be harmony in this universe.

### 2. SHATKARMA

*Shatkarma* (cleansing techniques) are six in number with each consisting of a variety of practices. There are certain *Shatkarmas* that are useful for a common person. In this chapter, the technique, benefits, and precautions of some of the important *Shatkarmas* will be described in detail. According to *Hathayogic* tradition, the body must be cleaned by performing the following.

#### i. Jala neti

##### Preparations

- Take a *Neti* pot (pot with a spout or nozzle, which can be inserted in the nostrils with ease).
- Fill the pot with salty water (one tsp. salt in half a litre of lukewarm water).

##### Technique

- Sit in *Kagasana*. Make 1.5 to 2 feet distance between the feet.
- Lean forward from the lower back. Tilt the head to the opposite side of the nostril whichever is more active at the moment.
- Insert the nozzle of the pot into the nostril, which is active at that moment.
- Slightly open the mouth and breathe through it.
- Keep the body relaxed. Let the water flow in through one nostril and let it out through the other nostril.
- After finishing half of the water put down the pot and clear the nose. Repeat with the other nostril. Clear the nose.



##### Time

*Jala neti* can be done at any time of the day. It can be performed even several times a day if one has cold. It removes the breeding ground for germs in the olfactory zone.

## Precautions

- *Jala Neti* should be followed by *Bhastrika Pranayama* (Bellows breath) to dry the nose. Do *Bhastrika* (Bellows breath) with one nostril closed; repeat with the other nostril; and then do with both nostrils open. Do not blow very hard as it may push water into the ears.
- Salt should be added to the water in appropriate proportion as too much and too little salt will cause burning sensation and pain.
- Breathe through the mouth throughout the practice.

## Health Benefits

- The practice of *Neti* helps to dissolve and remove accumulated harmful mucus from the nasal passage benefitting the naso-pharynx, and generating a healthy mucous membrane.
- It benefits the eyes by improving the drainage system of the eyes.
- It keeps the sinuses healthy by flushing the mucus out of them.
- It makes breathing system unobstructed and well regulated.

## Contra-indications

- *Jala neti* is not contra-indicated as such in any condition, but it is better to perform under the guidance of a Yoga expert, especially by those suffering from hypertension, migraine, nasal bleeding or with a history of nasal medications.

## ii. Sutra Neti

### Preparations

- Take cotton thread carefully twisted and soaked in bees-wax. A thin rubber catheter can also be used as *Sutra*.

### Technique

- Sit in *Kagasana*.
- Insert *Sutra* (thread or rubber catheter) into one of the nostrils, whichever is more active at the moment. Gently push it through the nostril using both hands.
- When the thread (*Sutra*) has come through to the back of the throat, put the index and middle fingers into the mouth; catch hold of the *Sutra*; and draw it out carefully and slowly through the mouth. Leave a few inches of the thread hanging out of the nose.
- Now, slowly and gently pull the thread forward and backward several times.
- Slowly take the thread out and repeat the practice through the other nostril.



## Precautions

- *Sutraneti* should be performed before *Pranayama* practices as it clears the passage and helps in unobstructed flow of air through the nostrils.
- The *Sutra* should be clean and it should be inserted and pulled very slowly and gently.
- It should be followed by *Jala neti* to completely clean the passages. This could be done once a week followed by *Jala neti*. If the passages are particularly blocked, *Jala neti* can be done both before and afterwards.

## Contra-indications

- Persons suffering from nose bleeding should consult the expert before practising it.
- Anyone with nasal ulcers, polyps, or severe malformations of the nasal septum should avoid *Sutra neti*.



## 3. YOGIC SUKSHMA VYAYAMA (Micro circulation practice)

### a) Neck Movements

#### i. Forward and backward bending/Stretching:

- Stand with the feet 2-3 inches comfortably apart.
- Keep the hands straight beside the body.
- This is *Samasthiti*.
- Keep your palms on the waist.
- While exhaling, move the head forward slowly and try to touch the chin to the chest.
- While inhaling, move the head as far back as comfortable.
- This is one round, repeat two more rounds.



#### ii. Right and left bending/Stretching:

- While exhaling, bend the head slowly to the right; bring the ear as close as possible to the shoulder without raising the shoulder.
- While inhaling, bring the head to the normal position.
- Similarly, while exhaling bend the head to the left side.
- Inhale and bring the head up to normal position.
- This is one round, repeat two more rounds.

### iii. Right and left twisting:

- Keep the head upright.
- While exhaling, gently turn the head to the right so that the chin is in line with the shoulder.
- While inhaling, bring the head to the normal position.
- Similarly, while exhaling, turn the head to the left.
- Inhale and bring the head to the normal position.
- This is one round, repeat two more rounds.



### iv. Neck rotation (Clock and anti-clock wise):

- Exhale; bend the head forward trying to touch the chin to the chest.
- Inhale; slowly rotate the head clockwise in a circular motion, exhale while coming down
- Do a full rotation.
- Then, rotate the head in an anti-clockwise direction.
- Inhale; go back and exhale; come down.
- This is one round; repeat two more rounds.
- Come back & relax.



#### Note:

- ✓ Move the head as far as possible. Do not overstrain.
- ✓ Keep the shoulders relaxed and steady.
- ✓ Feel the stretch around the neck and loosening up of the joints and muscles of the neck.
- ✓ Can be practised sitting on a chair.
- ✓ People with neck pain can do the practice gently especially when taking the head back to the extent it is comfortable.
- ✓ Elderly people and persons with cervical spondylitis and high blood pressure may avoid these practices.

## b) Shoulder Movements

### i. Shoulder stretch

- Feet together; the body straight, and the arms by the sides.
- While inhaling, raise both arms sideways above your head with the palm outward.
- Exhale and bring it down in the same manner.
- The arms must not touch the head while going up or the thighs while coming down.
- Palms must be opened, with fingers together.
- This is one round, repeat more rounds.



### ii. Shoulder rotation (forward and backward)

- Stand erect.
- Place the fingers of left hand on the left shoulder and the fingers of right hand on the right shoulder.
- Inhale and raise the elbows and bring them back while exhaling.
- Try to touch the elbows in front of the chest on the forward movement and touch the ears while moving up.
- Stretch the arm back in the backward movement and touch the side of the trunk while coming down. Rotate both elbows in a circular manner. It is the clockwise rotation and repeat it for 5 times.
- Inhale and raise the elbows and bring them back while exhaling.
- Do the same in reverse (anti-clockwise) manner. Inhale while raising the elbows and exhale while bringing them down.
- This is one round; repeat two more rounds.
- Come back & relax.



### Benefits

- Practice of this *kriya* makes the bones, muscles, and nerves of the shoulder region healthy.
- These practices are helpful in cervical spondylitis and frozen shoulder.

## c) Trunk Movement

### Trunk twisting (*Kati Shakti Vikasak*)

- Keep the legs about 2–3 feet apart.
- Raise both the arms up to chest level with palms facing each other and keep them parallel.
- While exhaling, twist the body towards the left side so that the right palm lies close to the left shoulder and right elbow at shoulder level, come back with inhalation.
- While exhaling, twist the body towards the right side so that the left palm lies close to the right shoulder, and left elbow is at the level of left shoulder then come back with inhalation.
- This is one round, repeat two more times.
- Relax in *Samasthiti*.



#### Note:

- ✓ Do slowly with normal breathing.
- ✓ Cardiac patients should do it carefully.
- ✓ Avoid this practice in case of severe back pain, vertebral and disc disorders, after abdominal surgery, and during menstruation.



## d) Knee Movement

- Inhale, lift your arms up at the shoulder level, palms facing downwards.
- Exhale, bend the knees and bring down your body in the squatting position.
- In the final position, both the arms and thighs should be parallel to the ground.
- Inhale, straighten the body.
- Exhale while bringing down the hands.
- Repeat two more times.

#### Note:

- ✓ Strengthens knee and hip joints.
- ✓ Avoid this asana in case of acute conditions of arthritis.



### e) Ankle Movement

#### i. Ankle stretch

- With the feet together, stand erect.
- Stretching forward one leg and holding it about 9 inches off the ground, move foot up and down then right and left.
- Repeat with the other foot.
- Repeat two more times.

#### ii. Ankle rotation

- With both feet together, stand erect.
- Stretching forward one foot and holding it about 9 inches off the ground, and circle first from right to left, then from left to right, with the ankle.
- Repeat with the other foot.
- Repeat two more times.

#### Note:

- ✓ The exercise relieves rheumatism of the ankles and strengthens the toes and the feet
- ✓ Avoid this *Asana* in case of acute conditions of arthritis.



### 4. YOGIC STHULA VYAYAMA

#### i. Rekhagati

- With the left foot on the ground, place your right foot in front of it so that the right heel touches the toes of the left foot.
- Now walk 50 steps ahead with the heel of one foot touching the toes of the other, taking care to see that the entire distance is covered in a straight line.
- Then walk backwards, in the same manner and in a straight line.
- Keep your chin parallel to the ground and gaze at any point in front of you (person who not able to gaze should look at their feet while walking). This exercise increases the power of concentration and improves the balance of the body.

## ii. Urdhva-gati (Upward movement)

- With feet one foot apart hold one arm bent at the elbow at an angle of 90 degrees while the other is stretched straight upwards.
- The palms of both the hands must remain open, facing outward with fingers together.
- Bend your left knee and stretch your right arm upwards. Repeat this process with the right foot and left arm raised. Breathe in and out to synchronise with the movement of your limbs.
- 10 times to begin with. This exercise is good for the limbs and for blood circulation.



## iii. Sarvangpusthi (Developing the entire body)

**Sthiti:** Samasthiti (Alert Posture)

### Technique

- With your feet as wide apart as possible, stretch the arms upwards, one wrist upon the other, forming fists with the thumbs tucked in.
- Inhale deeply while stretching upwards and bend towards the right side while exhaling.
- Come back in the middle with inhalation.
- Now, bend towards the left side while exhaling.
- Again come back in the middle with inhalation.
- This is one round.
- Repeat more rounds.

### Note:

- ✓ The whole body becomes supple and strong, stiff backs are cured.



Step 1



Step 2



Step 3



Step 4



Step 5



Step 6



Step 7

## 5. SURYA NAMASKAR

The ideal time to practise *Surya Namaskar* is at sunrise, the most peaceful time of day. Whenever possible, practise in the open air, facing the rising sun. Sunset is also a good time to practise as it stimulates the digestive fire. *Surya Namaskar*, however, may be practised at any time provided the stomach is empty.

*Surya Namaskar* consists of 12 positions as given below.



**Pranamasana**

### Position 1: *Pranamasana* (Prayers pose)

- Stand with the feet together or slightly apart, and the arms hanging loosely by the side of the body.
- Inhale, close the eyes gently and become aware of the whole physical body as one homogeneous unit.
- In this position, the body may sway from side to side or backwards and forward.
- Try to minimise this oscillation and balance the body weight equally on both feet.
- Exhale, slowly bend the elbows and place the palms together in front of the chest in *Namaskara Mudra*, mentally offering homage to sun, the source of all life. The awareness may be kept on the chest area.

### Position 2: *Hastottanasana* (Raised arms pose)

- Inhale, raise and stretch both arms above the head.
- Keep the arms separated, shoulder wide apart.
- Bend the head, arms, and upper trunk backwards.
- The awareness may be kept on the stretch of the abdomen and expansion of the lungs.



**Hastottanasana**



**Padahastanasana**

### Position 3: *Padahastanasana* (Hand-to-foot pose)

- Exhale, bend forward until the fingers or palms of the hands touch the floor on either side of the feet.
- Try to touch the knees with the forehead. Do not strain.
- Keep the knees straight. The awareness may be kept on the pelvic region.

#### Position 4: *Ashwasanchalanasana* (Equestrian pose)

- Inhale, place the palms of the hands flat on the floor beside the feet.
- Stretch the right leg back as far as possible.
- At the same time, bend the left knee, keeping the left foot on the floor in the same position.
- Keep the arms straight.
- In the final position, the weight of the body should be supported by the hands, the left foot, right knee, and toes of the right foot. The head should be tilted backwards, the back arched and the inner gaze directed upwards to the eyebrow centre.
- The awareness may be kept on the stretch from the thigh to the chest or on the eyebrow centre.



**Ashwasanchalanasana**

#### Position 5: *Parvatasana* (Mountain pose)

- Exhale, take the left foot back beside the right foot.
- Simultaneously, raise the buttocks and lower the head between the arms, so that the back and legs form two sides of a triangle.
- The legs and arms should be straight in the final position.
- Try to keep the heels on the floor in the final pose and bring the head towards the knees. Do not strain.
- The awareness may be kept on relaxing the hips or on the throat region.



**Parvatasana**

#### Position 6: *Ashtanga Namaskarasana* (Salute with eight parts or points)

- Lower the knees, chest, and chin to the floor.
- In the final position, only the toes, knees, chest, hands, and chin touch the floor.
- The knees, chest, and chin should touch the floor simultaneously. If this is not possible, while inhaling, first lower the knees, then while exhaling the chest in between the palms, and finally the chin.
- The buttocks, hips, and abdomen should be raised.
- The awareness may be kept on the abdominal region.



**Ashtanga Namaskarasana**



**Bhujangasana**

### Position 7: *Bhujangasana* (Cobra pose)

- Inhale, lower the buttocks and hips to the floor, straightening the elbows, arch the back and push the chest forward into the cobra pose.
- Bend the head back and direct the gaze upwards to the eyebrow centre.
- The thighs and hips remain on the floor and the arms support the trunk.
- Unless the spine is very flexible, the arms will remain slightly bent.
- The awareness may be kept on relaxation of the spine.

### Position 8: *Parvatasana* (Mountain pose)

- This stage is a repeat of position 5.

### Position 9: *Ashwasanchalanasana* (Equestrian pose):

- This stage is the same as position 4. this time move your right leg forward so that left leg stretched back.

### Position 10: *Padahastasana* (Hand-to-foot pose)

- This stage is the same as position 3.

### Position 11: *Hastottanasana* (Raised arms pose)

- This stage is the same as position 2.

### Position 12: *Pranamasana* (Prayer pose)

- This stage is the same as position 1.

### Benefits

- *Surya Namaskar* is a complete *Sadhana*, spiritual practice in itself as it includes *Asanas*, *Pranayama*, *Mantras*, and meditation techniques.
- *Surya Namaskar* makes the practitioner physically fit, mentally alert, and emotionally balanced by bringing fresh, oxygenated blood to the brain.
- It stimulates all the systems of the body, mainly endocrine, reproductive, circulatory, respiratory and digestive systems.
- Its influence on the endocrine glands helps to balance the transition period between childhood and adolescence in growing children.
- Makes the spine and waist more flexible, strengthens the muscles of the arms and waist.
- Improves digestion, helps in reducing the fat around the abdomen and thus reduces weight.

### Contra-indications

People suffering from fever, high blood pressure, coronary artery disease, stroke, hernia, intestinal tuberculosis should not practise *Surya Namaskar*. Further, during the onset of menstruation, *Surya Namaskar* should not be practised.

## 6. YOGASANAS

### i. STANDING POSTURES

#### Tadasana

##### Salient Features

- *Tadasana* is named after the *Tada* (Palm tree) as in the final posture, the body remains erect in standing position like a palm tree.

##### Technique

- Stand straight on the ground with feet together.
- While inhaling, raise the arms with palms open.
- Raise your heels. Standing on toes, stretch the whole body from toes to fingers.
- Maintain this posture with normal breathing or holding the breath for a while.
- While exhaling, slowly bring the arms down along with the body.
- Relax for a while in standing position.



Tadasana

##### Health Benefits

- This *Asana* stretches the muscles and nerves of the whole body; and develops physical and mental balance.
- It helps to clear up the congestion of spinal nerves at the point where they emerge from the spinal column.
- It is helpful in increasing the height of young growing children.
- It is helpful for the patients of sciatica.

##### Contra-indications

- Avoid lifting the toes in case of cardiac problems and knee arthritis.
- Extra care is needed in case of low blood pressure.



Vrksasana

#### Vrksasana (Tree Posture)

##### Salient Features

- *Vriksha* means tree. The final position of this *Asana* is a stand-still position, which resembles the shape of a tree, hence the name is *Vrksasana*.

##### Technique

- Stand straight, put the feet together and keep the arms straight on the sides.
- Lift the right foot and grasp the ankle by your right hand.
- Fold the right leg and try to maintain the balance.
- Place the right heel at the top, i.e., the root (joint region) of the left thigh with the help of both hands.

- Press the thigh with the sole of the right foot, pointing toes downwards.
- Keep the folded leg at right angle to the other leg. Now join the palms and fingers in supplication manner, raise them and keep them at chest, slowly raise them above the head.
- Keep the body in balance for some time.
- Now bring your hands down and come back to the original position.

### Health Benefits

- It improves neuro-muscular coordination, balance, endurance, and alertness.
- It increases flexibility of joints of knees and ankles, and strengthens them.
- It tones up the leg muscles and ligaments.

### Contra-indications

- This posture should be avoided in case of obesity, arthritis, and vertigo.

### *Katichakrasana (Lumbar-wheel posture)*

#### Salient Features

- *Kati* means waist and *chakra* means a wheel. In this *Asana*, one has to twist the waist to the right and left sides. While doing so, the waist moves like a wheel, therefore, it is named as *Katichakrasana*..

#### Technique

- Stand firmly on the ground with feet 1-2 inches apart.
- Now, keep the arms out-stretched in front of the chest with palms facing each other.
- Swing the arms slowly towards the right side of your body.
- Twist your body from the waist and try to take your arms back as far as possible.
- While swinging towards the right side, the right arm should be kept straight and the left arm should be bent.
- Repeat the practice from the left side as well.

#### Benefits

- The waist becomes slim and supple; and the chest expands.
- It relieves constipation and makes the lumbar region strong.
- The ribs become resilient, thereby many respiratory ailments, even tuberculosis of lungs can be prevented.
- It strengthens shoulders, neck, arms, abdomen, back, and thighs.



**Katichakrasana**

## ii. SITTING POSTURES

### *Pashchimottanasana*

#### Salient Features

- *Pashchimottanasana* comprises three words: *pashchim*, *uttana*, and *Asana*. *Pashchima* literally means the west. Here, *pashchim* implies posterior or back of the body; *Uttana* means stretched. In this *Asana*, the back side of the body, including the spinal column, gets stretched, hence, the name.



**Pashchimottanasana**

#### Technique

- Sit on the ground, stretching both the legs in front. Place hands by the sides with palms resting on the ground. Fingers should remain together pointing forward.
- Loosen your back muscles and bend the body forward as far as possible.
- Maintain this pose for as long as comfortable.
- To come back, loosen your hands and place them where they are comfortable. It would be easier if they are put on the thighs.
- Practise this *Asana* daily and keep trying forward bending a little more till you are able to hold the big toes of the legs with forefingers of respective hands. The navel should be touching the thighs.
- Bring chest and head close to the legs as much as possible; and place the elbows by the sides of the legs on the ground.
- Maintain the posture as per the capacity. Come back by raising the chest and head from the legs.

#### Health Benefits

- It enhances digestive fire; it helps to make the abdomen flat.
- It is useful in the management of digestive disorders especially constipation, flatulence, and loss of appetite.
- It removes the possibilities of sciatica.

#### Contra-indications

- Those suffering from sciatica or slipped disk should not practise it.

### *Ushtrasana*

#### Salient Features

- *Ushtra* means camel. The body in this posture resembles the posture of a camel, hence the name.

#### Technique

- Sit in *Vajrasana*.
- Bring the knees and the feet a few inches apart and stand on your knees. While inhaling, bend backwards with the right palm on right heel and the left palm on left heel; exhale.
- Be careful not to jerk the neck while bending backwards.



**Ushtrasana**

- In the final position, the thighs will be vertical to the floor and head tilted backwards.
- The weight of the body should be evenly distributed on the arms and legs.
- Remain in the posture for 10-30 seconds with normal breathing.
- Return with inhalation; sit in *Vajrasana*.

### Health Benefits

- It alleviates constipation and digestive problems.
- It stretches the front of the neck.
- It regulates the functions of the thyroid gland.
- This is useful in back pain, drooping shoulders, and rounded neck.

### Contra-indications

- Those suffering from high blood pressure, heart disease, hernia, and severe pain in lower back should not practise it.



**Shashankasana**

### Shashankasana

#### Salient Features

- *Shashanka* means 'moon' or 'hare in the lap'. In this posture, the body takes the shape of a hare, hence the name.

### Technique

- Sit in *Vajrasana*. Keep the spine erect.
- Spread both the knees wide apart while toes remaining together.
- Raise both arms above the head. Keep the arms apart at shoulder width.
- Exhaling, bend forward from the waist with the arms straight.
- Chin and arms should be resting on the floor.
- Gaze at any point in front of you and maintain the position for as long as comfortable.
- While coming back, slowly come back to the initial position.

### Health Benefits

- This *Asana* improves the functioning of adrenal glands.
- It helps to alleviate disorders of reproductive organs.
- It helps to relieve constipation.
- It helps to relieve backache.

### Contra-indications

- People suffering from very high blood pressure, vertigo, and slipped disc should avoid the practice of this *Asana*.

## Vakrasana

### Salient Features

- *Vakra* means twisted. In this *Asana*, the spine is twisted, hence the name.

### Technique

- Sit on the ground with legs stretched out.
- Bend the left leg from the knee and place the foot beside the right knee.
- Keep the spine straight and twist the waist towards the left as you exhale.
- Try to bring the right arm towards the left side foot in such a way that the outer side of the right arm touches the outer side of the left leg; and place the right hand beside the left foot.
- Take the left arm back and keep the palm on the ground in such a way that the trunk is kept erect with a proper twist.
- Repeat from the opposite side.



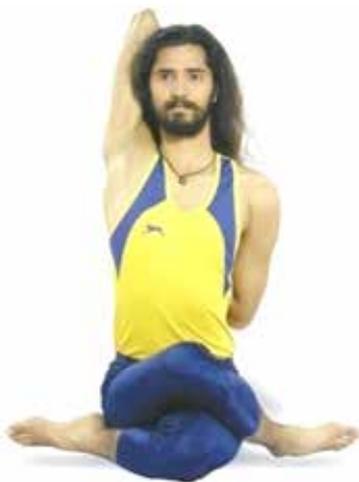
Vakrasana

### Health Benefits

- This *Asana* makes the spinal bone flexible and tones up the spinal nerves.
- It stimulates the pancreas and is useful for diabetes.
- It improves the capacity of lungs.

### Contra-indications

- Those suffering from stiffness in spine should practise it carefully.
- People with cardiac problems and pregnant ladies are advised not to perform this *Asana*.



Gomukhasana

## Gomukhasana

### Salient Features

- *Gomukhasana* is a traditional posture. In Sanskrit language *Gomukha* means 'Cow's face'. In this *Asana*, the position of the legs looks like the face of a cow; therefore, it is known as *Gomukhasana*.

### Technique

- Sit erect, stretching both legs together in front. Place your hands by the side, palm resting on the ground with fingers together.
- Fold the left leg from the knee and place it on the ground by the side of the right buttock.
- Similarly fold the right leg from the knee; bring it over the left leg and place the right heel by the left buttock.
- Raise the left arm, bend it at the elbow and take it below the shoulders towards the back.
- Raise the right arm, bend it at the elbow and take it upwards and behind the back.
- Interlock the fingers of both the hands behind the back.

- Now try to extend the head backwards against the elbow as much as possible.
- Gaze in front.
- Stay in this position for as long as comfortable and then return to the original position.
- Repeat the same by changing the position of the legs and hands.

### Health Benefits

- This helps in curing cramps in legs and making the legs flexible.
- It is useful in frozen shoulders, neck pain, and cervical spondylosis.
- Practice of this *Asana* strengthens muscles of the back and biceps; it helps in making the spine straight.
- It gives good exercise to the lungs and helps in respiratory diseases.

### Contra-indications

- Those suffering from bleeding piles should not practise it.
- Those suffering from any kind of hip problems or injury at the knee, hamstring, and quadriceps should be avoided.
- Persons having sciatica, any kind of neck and shoulder injury should avoid this *Asana*.



**Makarasana**

### iii. PRONE POSTURES

#### *Makarasana*

#### Salient Features

- In Sanskrit, *Makara* means crocodile. In this *Asana*, the body resembles a relaxing crocodile.
- *Makarasana* is a relaxing posture.

### Technique

- Lie down flat, with chin, chest, and abdomen touching the ground.
- Spread the legs a little apart and place them comfortably on the ground in such a position that the heels face each other and toes point outwards.
- Take the hands one by one beneath the head; grasp the hands with each other lightly forming a triangle. Now place the forehead on the hands and dip the face into the space.
- Slowly close eyes and relax. Do normal breathing and remain in this position as long as comfortable.

### Health Benefits

- It is good for countering stress and anxiety.
- It helps in backache problem.
- This *Asana* is beneficial in case of slipped disc, sciatica, lower back pain or other spinal disorder.

### Contra-indications

- Those suffering from, back, shoulder or neck injury, high blood pressure, heart disease and those having complaints of asthma should not practise it.

## Bhujangasana

### Salient Features

- *Bhujanga* means cobra. The final position of this *Asana* resembles the shape of a cobra.

### Technique

- Lie down on stomach with legs together, toes pointing outwards, hands by the sides of the thighs, palm facing upwards, and forehead resting on the ground.
- Fold hands at the elbows, place palms on the ground to the sides of the shoulder; thumbs should be under the armpit.
- Bring chin forward and place it on the ground, gaze in front.
- Slowly raise the head, neck, and shoulders. Raise the trunk up to the navel. Raise the chin as high as possible.
- Maintain the posture for as long as comfortable. Then slowly bring the body down on the ground, starting from upper part of the navel region, thorax, shoulder, and chin; and lastly place the forehead on the ground.
- Place the hands by the sides of the thighs, and relax.



**Bhujangasana**

### Health Benefits

- This *Asana* is effective in relocating slipped disc.
- It stimulates appetite and alleviates constipation.
- It is beneficial for abdominal organs especially liver and kidneys.
- It stimulates adrenal glands to work more efficiently.
- It tones the ovaries and uterus, and helps alleviate menstrual and other gynaecological disorders.

### Contra-indications

It is strictly prohibited for the patients of hernia, peptic ulcer, intestinal tuberculosis, hyper-thyroidism, and in case of abdominal injuries.



**Ardhalasana**

### iv. SUPINE POSTURES

#### *Ardhalasana and Halasana (Half-plough posture and plough posture)*

*Hala* means plough. This posture is known as *Halasana* because in its final position, the body resembles the shape of an Indian plough. Those who cannot perform *Halasana* are advised to do *Ardhalasana*.

### Technique

- Take supine position, hands by the sides of thighs, palms resting on the ground.
- Slowly raise your legs together without bending at knees and stop at 30° angle.

- After a few seconds, raise your legs further up to 60° angle and maintain the position.
- Now slowly raise the legs at 90° angle. This is the final position of the *Ardhahalasana*.
- Pressing the hands, lift the buttocks rolling the back away from the floor; bring the legs towards the head and touch the floor with the toes behind the head.



**Halasana**

- The body from hip to shoulders should be kept straight.
- Maintain this position for as long as comfortable.
- Stretch the hands straight keeping them on the ground behind the back. This is *Halasana*. Maintain the posture for as long as comfortable.
- While returning to the original position, lower the waist and raise the legs from the ground.
- Slowly let the waist rest on the ground and bring the legs first at 90° angle and then on the ground without lifting the head.

### Benefits

- This asana is beneficial in cases of dyspepsia and constipation.
- The practice of this *Asana* is useful for diabetes, piles, and throat-related disorders.
- Maximum benefits of *Halasana* can be derived when *Bhujangasana* is also practised immediately after *Halasana*.

### Precaution

Those suffering from cervical spondylitis, stiffness in spine, and hypertension should avoid this practice.

### **Sarvangasana (Shoulder Stand Posture)**

*Sarvangasana* means the *Asana* that influences all limbs of the body. According to *Swami Dhirendra Brahmachari*, it is called as *Urdhvasarvangasana*. A shoulder-stand position is adopted in this *Asana*. *Sarvangasana* can be called an extension of of *Uttanpadasana* and *Viparitarani mudra*.

### Technique

- Take supine position, hands straight by the side of the thighs, palms resting on the ground.
- Slowly raise the legs together without bending at the knees by pressing the hands. Stop at 30° angle.
- Raise the legs a little more and stop at 60° angle.
- Now slowly bring it to 90° angle.
- Pressing the hands, bring the legs towards head by raising the buttocks up. Raise the legs, abdomen, and chest. Form a straight line. Place the palms on your back for support.
- Place the chin against the chest (jugular notch). Maintain the position as long as comfortable.



**Sarvangasana**

- Slowly return to the original position. While doing this, first lower the buttocks with hands supporting the back; slowly place the buttocks on the ground and bring the legs at 90° angle.
- Gradually bring the legs down; place them on the ground without bending them at the knees; and return to the starting (supine) position.

### Benefits

- This *Asana* removes the symptoms of immature old age and early greying of hair.
- It is helpful in the treatment of diseases like dyspepsia, constipation, hernia, and visceroptosis, piles, uterus prolepses, and problems related to endocrine glands.

### Precaution

- People suffering from highblood pressure, epilepsy, neck pain, sciatica, and lumber pain should not practise it.

### Matsyasana

#### Salient Features

- In Sanskrit, *Matsya* means fish. In the final position of this *Asana*, the body takes the shape of a fish; hence the *Asana* is known as *Matsyasana*.



**Matsyasana**

#### Technique

- Sit in *Padmasana/Sukhasana/Dandasana*.
- Slowly bend backwards and lie on your back completely. Lift the upper back with the support of elbows and palms and try to place the crown of your head on the ground.
- Try to hold the left foot with the right hand and subsequently the right foot with the left hand (in case sitting in *Padmasana*), or place your palm on upper thigh close to your hip, resting the elbows on the floor.
- The knees must touch the ground and the back should be arched to the extent that the body is supported on the head and the knees. Maintain the final posture.
- While returning, release the toes, place palms on the ground, straighten the head with the help of hands and come up slowly.
- Relax in *savasana*.



**Saralmatsyasana**

#### Health Benefits

- This *asana* gives stretch to the intestine and abdominal organs; it is effective in alleviating abdominal disorders.
- It gives relief to patients of asthma and bronchitis.
- It alleviates backache and cervical spondylitis.
- The stretch in the neck helps in regulating the functioning of thyroid gland.

#### Contra-indications

- People who are suffering from heart problems, peptic ulcer, hernia or any serious spinal ailments should not do this *Asana*. Pregnant women also should not perform it.

## Setubandhasana (Bridge Posture)

### Salient Features

- *Setubandha* means formation of a bridge. In this *Asana*, the body is positioned like a bridge; hence it is called *Setubandhasana*.

### Technique

- Bend both the legs at the knees and bring the heels near the buttocks.
- While holding both the ankles firmly keep the knees and feet in one straight line.
- Inhale, slowly raise your buttocks and trunk up as much as you can to form bridge.
- Remain in this position for 10-30 seconds, with normal breathing.
- Exhale, slowly return to the original position and relax in *Shavasana*.



Setubandhasana

### Health Benefits

- It relaxes neck.
- It tones lumbar region of the spine and makes the spine flexible.

### Contra-indications

- People suffering from high blood pressure, cardiac diseases, and stomach ulcers should not perform this *Asana*.



Pawanmuktasana

## Pawanmuktasana

### Salient Features

- *Pawana* means wind and *mukta* means released. As the name suggests, the practice of this *Asana* helps in releasing excessive gas from the body. This *Asana* when performed with one leg is called *EkapadaPawanamuktasana*.

### Technique

- Lie flat on your back. Stretch out both the legs.
- Now lift the right leg and bend it at the knee.
- Hold the knee by locking both the arms.
- Exhale and hold your breath; slowly press your knee and bring it down towards the chest.
- While exhaling, raise the head and pull the knee closer to the chest so that the nose touches the knee.
- Stay in this position for as long as possible with the breath.
- While exhaling, bring the head and then leg back to the floor.

- Repeat the practice with the left leg. This is one round of *Ekapada Pawanamuktasana*.
- Now lift both legs, bend them at the knees, and encircle the knees with both arms. Press the knees and bring them towards the chest. Raise the head and pull the knees closer to the chest so that the chin touches the knees. This is *Pawanamuktasana*.

### Health Benefits

- The practice of this *Asana* gives relief in flatulence by eliminating toxic gases from the abdomen; it decreases bloating feeling in the abdomen; and relieves constipation.
- It is useful in the treatment of impotence, fertility, and menstrual problems as it massages the pelvic muscles and reproductive organs.

### Contra-indications

- People suffering from high blood-pressure, sciatica or slipped disc should not practise it.

### Shavasana

#### Salient Features

- In Sanskrit, *shava* means 'dead body'. The posture is called *Shavasana* as the body in this *Asana* resembles a dead body.
- This is a relaxing posture. It should be performed after performing *Asanas* or whenever one feels physically or mentally tired.



Shavasana

#### Technique

- Lie down on the back with the hands comfortably away from the body.
- Make a distance of one to two feet between the feet with toes pointing outward.
- Place both the hands on the ground, 10 inches away from the body with fingers in a semi-flexed position and palms facing upwards.
- Keep the head in a most convenient position.
- Gently close the eyes; breathe normally or practise moderately deep abdominal breathing.
- Attend to the flow of the breath without moving the body.
- Try to relax all parts of the body by diffusing the tension in each part of the body.

### Health Benefits

- It relaxes the whole psycho-physiological system.
- It removes fatigue caused by other *Asanas*; induces calmness of mind and destroys fatigue.
- It is helpful in developing body awareness.
- It is very beneficial for managing high blood pressure and anxiety disorders.

### Contra-indications

- Severe back injury and acid reflux (may be practised with the head a little bit raised using props).

### 7. KAPALBHATI



### Kapalabhati

*Kapalabhati* is a breathing practice where the lower abdominal muscles are used like blacksmith's bellows for exhalation (*Rechaka*). In this, breathing is done like the pumping action of a pair of bellows. In *Kapalabhati*, exhalation is done forcefully by contracting abdominal muscles while inhalation remains automatic and passive, and occurs spontaneously as a result of forced exhalation. *Kapalabhati* actively reduces the volume of air in the lungs through forced exhalation.

### Technique

- Sit in a meditative posture, eyes closed, and the whole body relaxed.
- Inhale deeply through both nostrils expanding the abdomen and exhale with a forceful contraction of the abdominal muscles.
- The next inhalation takes place passively allowing the abdominal muscles to expand. Inhalation should be spontaneous or passive without effort.
- The breathing must be of the bellows' type.
- Repeat this exercise rapidly several times. While doing this exercise, the abdomen should distend and contract.

### Health Benefits

- *Kapalabhati* clears the respiratory passage and keeps it free from impurities and excess mucus.
- It is useful in treating cold, rhinitis (inflammation of the mucus membrane of the nose), sinusitis, and bronchial infections.
- It stimulates nerves in the abdominal region; it massages abdominal organs and improves digestion.
- It increases the capacity of lung, purifies the frontal air sinuses, and stimulates the brain.

### Precautions

- It should be done before meditational practices and after *Asanas* and *Neti*.
- Inhalation should be spontaneous, i.e., without effort; and the exhalation should be with force but at the same time it should not make the person feel breathless.

### Contra-indication

- This practice should be avoided by the person suffering from cardiac conditions, giddiness, high blood pressure, vertigo, epilepsy, stroke, hernia, and gastric ulcers.

## 8. PRANAYAMA

### i. Nadishodhana Pranayama

#### Salient Features

- *Nadishodhana Pranayama* is also known as *Anuloma-Viloma Pranayama* in which the nostrils are alternatively used in reverse order, i.e., first exhalation and then inhalation.
- In *Gheranda Samhita* and *Hatha Yoga Pradipika*, *Nadishodhana Pranayama* has been considered a preparatory practice. This practice purifies the



Nadishodhana Pranayama

*Nadis* (channels) by removing the blockages; and facilitates free flow of *Prana* in *Nadis*.

- This is the most common *Pranayama* prescribed for everybody without any problem. However, those who have some health problems should perform it without *Kumbhaka*.

### Technique

- Sit in any comfortable meditative posture, preferably *Siddha/Siddhayony Asana* or *Padmasana* (those who cannot sit in a meditative posture may sit against a wall with the legs outstretched or in a chair which has a straight back).
- Keep the head and spine erect.
- Close the eyes.
- Without affecting the straight posture of the spinal cord, loosen the body by reducing the strain in the muscles. Pay attention to the breath.
- Looking at the tip of the nose adopt *Jnana mudra* and place the right hand on the right knee and the left hand on the left knee.
- Close the right nostril with the thumb. Inhale through the left nostril counting upto five.
- After five counts of breath, release the pressure of thumb from the right nostril and press the left nostril with the ring finger, blocking the flow of air.
- Exhale through the right nostril counting upto five keeping the respiration rate slow, deep, and silent.
- Inhale through the right nostril counting upto five.
- Exhale through the left nostril counting upto five, keeping the respiration rate slow, deep, and silent.

### Health Benefits

- It balances the left and right hemispheres; and promotes clear thinking, focus, and concentration.
- It strengthens the immunity system.
- It calms and stabilizes the mind, and reduces anxiety and stress.
- It strengthens abdominal muscles, and it helps to gain control over the diaphragm movement.
- It is beneficial in the management of asthma, allergies, high or low blood pressure, stress-related heart conditions, hyperactivity, insomnia, chronic pain, endocrine imbalances, psychological conditions such as anxiety and stress.

### Contra-indications

- People suffering from cardiac problems, high anxiety or nervousness should perform it without *Kumbhaka* (without retention is alright).
- Persons suffering from cold, fever, flu, and blocked sinuses should avoid it.

### ii. *Bhramari Pranayama*





**Bhramari Pranayama**

### Salient Features

The word *Bhramari* is derived from the word *Bhramara*, which means black humming bee. In *Bhramari Pranayama*, a humming sound resembling the buzzing of a black bee is made through the nostrils, hence the name of this *Pranayama* is *Bhramari*.

### Technique

- Sit in the position of *Padmasana* or *Siddhasana* or any comfortable sitting position.
  - Close the eyes; keep the mouth closed and inhale deeply.
  - While exhaling make a soft humming sound.
- Close both the ears with thumbs and exhale making a humming sound of a bee.

### Health Benefits

- *Bhramari Pranayama* delights the mind.
- It relieves tension, anxiety, and anger, and pacifies the mind.
- It takes consciousness inwards and facilitates the practice of meditation.

### Contra-indications

- It should not be practised during ear infection.
- People suffering from heart diseases should practise it without *Kumbhaka*.

### iii. Ujjayi Pranayama

#### Salient Features

- In this *Pranayama*, inhalation (*Puraka*) is done with both the nostrils; while for exhalation (*Rechaka*) the left nostril is used. During inhalation, a mild sound is produced by a partial closure of the glottis.
- This *Pranayama* may be practised even while standing or walking without *Kumbhaka*.

#### Technique

- Sit in *Padmasana* or *Siddhasana*.
- Close the mouth. Contract the region at the back of the throat, inhale slowly through both the nostrils in smooth and uniform manner till the breath fills the space from the throat to the heart.
- During inhalation, a peculiar sound is produced owing to the partial closing of glottis. This sound should be of a mild and uniform pitch. It should be continuous also.
- Expand the chest while inhaling.
- Retain the breath for as long as one can do it comfortably.
- Then exhale slowly through the left nostril by closing the right nostril with the right thumb.



**Ujjayi Pranayama**

- Instead of exhaling through left nostril, one can slowly exhale through both the nostrils.

### Health Benefits

- *Ujjayi Pranayama* increases digestive fire.
- It prevents *Jalodara* (dropsy of the belly).
- It removes phlegm in the throat and regulates thyroid gland.
- It helps in management of cardiac and pulmonary diseases.

### Contra-indications

- Persons with low blood pressure should not practise this *Pranayama*.
- Persons suffering from hypertension and cardiac disorders should not apply *Kumbhaka*; they should perform this without *Kumbhaka*.

## 9. DHYANA

### Salient Features

Dhyana is an act of contemplation. It pacifies the agitated mind; and makes it relaxed. There are several techniques of meditation but all have the common goal of attaining a higher level of awareness.

### Technique

- Sit in any comfortable meditative posture. Keep the spine erect. Place the hands on thighs in *Jnana mudra*.
- Gently close the eyes and slightly raise the face. Breathe normally.
- Now focus the attention on breath while breathing normally.
- Now, focus your attention on the space between the eyebrows. Stay in this state for five minutes or as long as possible.
- To come back, bring your attention back to breath and then the external surroundings.



Dhyana

### Benefits

- *Dhyana* rejuvenates the body and mind.

## 10. SHANTI PATHA

ॐ सर्वे भवन्तु सुखिनः  
सर्वे सन्तु निरामयाः ।  
सर्वे भद्राणि पश्यन्तु  
मा कश्चिद्दुःखभाग्भवेत् ।  
ॐ शान्तिः शान्तिः शान्तिः ॥

omsarvebhavantusukhinau sarvesantunirāmayāu |  
sarvebhadraēipaçyantumākacçitduùkhabhägभवत ॥  
omçāntiù çāntiù çāntiù ॥

May all be happy  
May all be free from disease  
May all see only things auspicious  
May none suffer from misery

## References for Yoga Practices

- **Prayer:** Rigveda 10.191.2
- **Shatkarma :** Gheranda Samhita i.50, i.51
- **Yogic Sukshma Vyayama (Micro Circulation Practice):** Yogic Sukshma Vyayama of Swami Dheerendra Bhrmhachari.
- **Yogic Sthula Vyayama:** Yogic Sukshma Vyayama of Swami Dheerendra Bhrmhachari.
- **Surya Namaskara:** Asana Pranayama Mudra Bandha by Swami Satyananda Saraswati, Surya Namaskara by Swami Satyananda.
- **Tadasana:** Also called as Taalaasana, Yogarahasya of Nathamuni, Kiran Tika, a commentary on Yoga sutras, Shree Yoga Kaustubha-25, Sachitra Caurasi Asana-34, Yoga Asanas by Swami Shivananda.
- **Vrikshasana:** Gheranda Samhita-ii.36, Brihad Yoga Sopana, Hatha Yoga Samhita-43, Yoga Marga Pradipa-11.
- **Kati Chakrasana:** A Monograph on Yogasana. MDNIY.
- **Pashchimottansana:** Gheranda Samhita-ii.24, Hatha Yoga Pradipika by Swami Muktibodhananda-i.28
- **Ushtrasana:** Shree Yoga Kaustubha, NagojiBhatta Vritti on Yogasutra-ii.46, Gheranda Samhita-ii.41 describes Ushtrasana which is done lying in prone position
- **Shashakasana:** Gheranda Samhita-ii.12 call it as Vajrasana, Hathayoga Samhita, Brhada Yoga Sopana, Sachitra Vyavaharika Yoga-16, Narada Purana-33-112, Brihannaradiya Purana, Yogamargapradipa, Yoga Bija-90, Yogasiksopanishad-I.111-112, Hatharatnavali-iii.9
- **Vakrasana:** Easier version of Matsyendrasana (mentioned in Hathapradipika) given by Swami Kuvalayananda in his book Asana
- **Gomukhasana:** Gheranda Samhita-ii.39; Hatha Yoga Pradipika-I-20.
- **Makarasana:** Jaipur Central Museum, with some variation in hands position
- **Bhujangasana:** Gheranda Samhita. ii.42, with some variation, Kirana Tika-ii.46 on Yoga sutra, Hatha Yoga Samhita-49, Shree Yoga kaustubha-62, Yogamargapradipika-19, Yoga Rahasya of Nathamuni-ii.14, Jaipur Central Museum-7174
- **Pawanmuktasana:** Shree Yoga Kaustubha. It is done in sitting as per Yoga Asanas-3, Sachitra cauryasin Asane-5-7, Shree Yoga kaustubha-5, Kirana Tika-ii.46 on Yoga Sutra
- **Sarvangasana:** Asana Pranayama Mudra Bandha by Swami Satyananda Saraswati-page no. 259; The Illustrated Light on Yoga by BKS Iyengar- page no. 90-94.
- **Setubandhasana:** Yogarahasya of Nathamuni
- **Ardha Halasana:** Yoga-rahasya II-7
- **Halasana:** Asana Pranayama Mudra Bandha by Swami Satyananda Saraswati
- **Matsyasana:** Asana Pranayama Mudra Bandha by Swami Satyananda Saraswati-page no. 187
- **Shavasana:** Gheranda Shamita-ii.19, Hathapradipika-i.32, Hatharatnavali-iii.20,76, Kapala Kurantaka Hathabhasya Paddhati-11, Yuktabhavadeva-vi.21, Asanani-14, Yoga Siddhanta Chandrika-ii.46, Shreetatva Nidhi-70, Kirana Tika on Yogasutra-ii.46, Brhada Yoga Sopana-iii.24, Hathapradipika, Shree Yoga Kaustubha-17.

- **Kapalabhati:** A variation of Bhastrika Kumbhaka of Gheranda Samhita-v.70-72, Kumbhaka Paddhati-164-165, Hathapradipika, Hatharatnavali-22-24, Hathatatvakaumudi-x.12-14, Yuktabhavadeva-vii.110-118.
- **Nadi Shodhana Pranyama:** Hathapradipika, it has visualization and internal retention breath. Additionally, Gheranda Samhita-v.38-45 has time units for inhalation, retention and exhalation.
- **Bhramari Pranayama:** Hathapradipika, Hatharatnavalli-ii.26, Kumbhaka Paddhati-169.
- **Ujjayi Pranayama:** Hatha Yoga Pradipika by Swami Muktibodhananda-ii.51-53, Gheranda Samhita-v.69-72.
- **Dhyana:** Yoga Sutra of Patanjali III.2

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## ANNEXURE 1

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## ANNEXURE 2

### COMMON YOGA PROTOCOL (CYP)

The United Nations designated June 21 as the International Day of Yoga (IDY) in 2014, to be observed annually. Since then, June 21 has been celebrated across the globe through a variety of events and programs, making IDY the largest public health movement in the world. The Ministry of Ayush, Government of India, being the Nodal Ministry for Yoga activities, developed the Common Yoga Protocol (CYP), which is a series of forty-five-minute-long Yoga practices that can be practiced by anyone, regardless of their age, gender, or fitness level.

The Common Yoga Protocol was prepared with the purpose to provide a concise yet informative introduction to Yoga and its practices to orient one towards achieving holistic health and to promote overall well-being of society at large. Moreover, it aims to raise awareness about the benefits of Yoga and its potential to bring about harmony and peace.

The CYP was prepared with an amalgamation of the ancient traditions of Yoga and the latest scientific insights on varied Yoga practices by a team of experts from the Ministry of Ayush, the Morarji Desai National Institute of Yoga (MDNIY), and other esteemed Yoga institutions. The team consisted of 20 Yoga experts who worked on developing the Yoga protocol over a period of several months.

The CYP was then reviewed and approved by a committee of over 50 Yoga experts, leading Yoga masters and researchers from various fields, including Yoga Philosophy, Anatomy, Physiology, Modern medicine and Yoga therapy. It was finally edited by Dr. Ishwar V. Basavaraddi, Director, Morarji Desai National Institute of Yoga (MDNIY), Ministry of Ayush, Government of India. The final version of the CYP was launched on the first-ever celebration of the International Day of Yoga i.e. June 21, 2015.

The CYP has been published in several languages to make it accessible to a wider audience worldwide. As per the Ministry of Ayush, Government of India, the Common Yoga Protocol is available in sixteen languages including English, Hindi, Sanskrit, Manipuri, Kannada, Marathi, Malayalam, Bengali, Kashmiri, Tamil, Urdu, Telugu, Assamese, Punjabi, Oriya and Gujarati. (<https://yoga.ayush.gov.in/common-yogaprotocol>).

S. No.	Practices	S.No.	Name of the Practice
I.	Invocation	1	Starting Prayer
II.	Loosening Practices	2	Neck Movements
		3	Shoulder's Movement
		4	Trunk Movement
		5	Knee Movement
		III.	Standing Asana
7	Vrikshasana		
8	Pada-hastasana		
9	Ardha Chakrasana		
10	Trikonasana		
Sitting Asana	Sitting Asana		
		12	Vajrasana
		13	Ardha Ushtrasana

		14	Ushtrasana
		15	Shashakasana
		16	Uttana Mandukasana
		17	Vakrasana
	<b>Prone Lying Asana</b>	18	Makarasana
		19	Bhujangasana
		20	Shalabhasana
	<b>Supine Lying Asana</b>	21	Setubandhasana
		22	Uttanapadasana
		23	Ardha Halasana
		24	Pawana Muktasana
		25	Shavasana
<b>IV.</b>	<b>Kriya</b>	26	Kaphalabhati
<b>V</b>	<b>Pranayama</b>	27	Nadi Shodhana Pranayama
		28	Sheetali Pranayama
		29	Bhramari Pranayama
<b>VI.</b>	<b>Dhyana</b>		
<b>VII.</b>	<b>Sankalpa</b>		
<b>VIII.</b>	<b>Shantih Patha</b>		
<b>Total Duration=45 minutes</b>			

### Committee of Yoga Experts:

- Dr. H. R. Nagendra**, Chancellor, Swami Vivekananda Yoga Anusandhana Samsthana University, Bangalore, **Chairman**.
- Sh. Anil Kumar Ganeriwala**, Joint Secretary, Ministry of Ayush.
- Sh. O.P. Tiwari**, Chairman, S.M.Y.M Samiti, Kaivalyadhama, Lonavla .
- Smt. Hansaji Jayadeva Yogendra**, Director, The Yoga Institute, Santacruz, Mumbai.
- Dr. Jaideep Arya**, Chief Central Coordinator, Patanjala Yoga Peeth, Haridwar.
- Sri Sridharan**, Krishnamacharya Yoga Mandiram, Chennai.
- Swami Bharat Bhushan**, President, Mokshayatan Yogashram, Saharanpur, U.P.
- Swami Shant Atmanand**, President, Ramakrishna Mission, New Delhi.
- Sh. Gaurav Verma**, Art of Living Foundation, New Delhi.
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- Sister Asha**, Director, Om Shanti Retreat centre, Brahma Kumaris, New Delhi.
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- Sh. Ramanand Meena**, Deputy Secretary, Ministry of Ayush.
- Dr. I.N. Acharya**, Programme Officer (Yoga Therapy), MDNIY, New Delhi.
- Dr. Ishwar V. Basavaraddi**, Director, MDNIY, New Delhi, **Member Secretary**.



## ANNEXURE 2

### Y Break “Yoga break at workplace” – Mobile App

Y Break “Yoga break at workplace” program was conceptualized by Ministry of Ayush, Government of India with an aim to get De-stressed, Refreshed and Re-Focused to increase the productivity of individuals at the work place by practicing selected Yoga practices of 5 minutes (twice a day) time frame to accrue the benefits as projected from Yoga practice for a longer duration.

The Yoga protocol in the Y-Break application comprises of a few simple Yogic practices consisting of *Asana*, *Pranayama* and *Dhyana*, which is as follows:

- *Tadasana- Urdhva-Hastottanasana*
- *Skandha Chakra- Uttanamandukasana*
- *Ardha Chakrasana, Prasarita Padottanasana*
- *Kati Chakrasana*
- *Deep Breathing, Nadishodhana Pranayama*
- *Bhramari Pranayama- Dhyana*

Y Break – Mobile app is freely available on Google play, IOS app store. This is very cost effective and user friendly. This app has already been downloaded 50 thousand times by the users and still there are registered participants.

Android version Download Link:

[https://play.google.com/store/apps/details?id=ayush.gov.in.ybreak&hl=en\\_IN&gl=US](https://play.google.com/store/apps/details?id=ayush.gov.in.ybreak&hl=en_IN&gl=US)

IOS versions Download Link: <https://apps.apple.com/in/app/y-break/id1555002781>





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