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Yoga Student Handbook

Class XI

Acknowledgements

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Bapu Nature Cure & Naturopathy, Art of Living, S-VYASA , Talwalkar's and Zorba who have reviewed and given input for this trainee manual. This participant manual is dedicated to all the aspiring youth who desire to achieve special skill which would be a lifelong asset for their future endeavours and help them make a bright career in the Beauty and Wellness Sector.

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About this book

The beauty and wellness industry in India is growing at a CAGR of 18.6 % and is likely to reach the 100,000 crore mark soon. The sector is thriving on the increasing section of the affluent and middle-class population that has started considering beauty and wellness as a necessity. Increased emphasis on holistic wellbeing with people's desire to look good and young are other motivators for the beauty and wellness industry. Employment in Beauty Sector was estimated to grow at a CAGR of 20%, with 23% in organised and 15% in unorganised segments with a shortage of over 600,000 skilled personnel by the end of 2016. With a shift in focus towards the quality of service, the industry has been looking to hire a skilled workforce to sustain growth.

This Yoga Student Handbook - XI is designed to enable theoretical and practical training to become a Yoga Instructor. The Qualification Pack of a Yoga Instructor includes the following National Occupational Standards which have all been covered in this Trainee Manual:

1. Prepare and maintain work area.
2. Conduct the basic yoga sessions.
3. Maintain health and safety at the workplace
4. Create a positive impression at the workplace.

This Yoga Student Handbook - XI is designed considering the minimum education qualification of Yoga Instructor to be preferably Class VIII pass. The key learning objectives and the skills gained by the participant are defined in their respective units. We would like to thank Ms. Vandana Luthra, Chairman of Beauty and Wellness Sector Skills Council for her constant guidance and support. We would also like to acknowledge the efforts put in by the BWSSC team, master trainer, consultants and our Industry Partners who give their valuable inputs in making this Participant Handbook. We hope that this Yoga Student Handbook - XI will be able to provide a sound learning support to our friends to aspire to build their career in the beauty and wellness industry.

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PRACTICAL

I. To introduce Yogic postures and Practices.

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Practices and Pranayama

Practice of the following Yogic practices with brief the oretical knowledge about their importance of name, technique, salient points, precautions to be taken and advantages of each of the following Yogic practices, e.g Shatkarma, Yogic Sukshma Vyayama & Sthula Vyayama, Surya Namaskara, Yogasanas, Pranayama, Bandhas, Mudras and Practices leading to Dhyana.

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- Dandasana, Bhadrasana, Padmasana, Vajarasana,
- Mandukasana, Ushtrasana, Shashankasana, Uttana Mandukasana, Kagasana
- Paschimottanasana, Purvottanasana

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- Vakrasana, Gomukhasana
- Bhujangasana, Shalabhasana, Makarasana
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- Class management in Yoga: its meaning and need

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- Models of Lesson Plan;

1. Introduction to Yoga and Yogic Practices

- Yoga: Etymology, definitions, aim, objectives and misconceptions
- Yoga: Its Origin, history and development
- Rules and regulations to be followed by Yoga Practitioners
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- Introduction to Yoga practices
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- Introduction to Yogic Sukshma Vyayama, Sthula Vyayama and Surya Namaskar
- Introduction to Yogasana: meaning, principles, and their health benefits
- Introduction to Pranayama and Dhyana and their health benefits
- Identify career opportunities in Yoga

UNIT 1 : INTRODUCCION TO YOGA AND YOGIC PRACTICES

Unit Objectives

At the end of this unit, you will be able to:

1. Explain the meaning of Yoga
2. Describe, why Yoga is so relevant in today's fast paced world
3. Explain different definiion of Yoga
4. Describe different streams of Yoga
5. Explain eight limbs of 'Ashtang Yoga'
6. Explain major benefits of doing Yoga
7. Describe the significance of 'Internaional Yoga Day'

What is Yoga?

The word Yoga is derived from Sanskrit word 'Yog', which means 'Jod' in Hindi or 'Joining' in English. This is joining of 'Jivatam' (Human) with 'Parmatma' (God). Through the practive of Yoga, one can have Self-realisaion and achieve God. 'Yog' word became Yog in English.

For a simple person, Yoga is another form of physical exercise. By doing physical exercises, one can develop only body muscles. But through Yoga, one achieves the condiioning of even all the internal organs like - heart, brain, spleen, liver, lungs, intesines, etc. Apart from these vital organs, through Yoga all the glands, like - thyroid, pituitary and penial gland of the brain, function better.



Fig. Yoga Pose



Fig. Human Body Parts that are Positively Effected by Yoga

Yoga

Yoga is practical aid, not a religion. Yoga is an ancient art based on a harmonizing system for development of the body, mind, and spirit. The regular practice of yoga will not only lead you to a sense of peace and well-being, but will also give you a feeling of being at one with the nature. In the present time, more and more people, especially the Westerners, are resorting to Yoga to find a cure for chronic health problems and attain a peace of mind. They are also curious about knowing what exactly is Yoga and what all are included in it. Although many of us are well aware of the health benefits of Yoga, not everyone knows about the origin and exact definition of Yoga. It is a popular belief that Yoga merely includes stretching and warm up exercises.



Fig. Dhyana Mudra in Yoga

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Originated in ancient India, Yoga typically means 'union' between the mind, body, and spirit. It involves the practice of physical postures and poses, which is also referred to as 'asana' in Sanskrit. As the name suggests, the ultimate aim of practising Yoga is to create a balance between the body and the mind and to attain self-enlightenment. To accomplish it, Yoga makes use of different movements, breathing exercises, relaxation technique, and meditation. Yoga is associated with a healthy and lively lifestyle with a balanced approach.

The oldest physical discipline in existence known to humanity, the Yoga brings stability to the body and the wavering mind. It increases the lubrication of joints, ligaments, and tendons of the body. Studies in the field of medicine suggest that Yoga is the only form of physical activity that provides complete conditioning to the body because it massages all the internal organs and glands. It reduces the risk of many diseases. Yoga can create a permanently positive difference to the lifestyle of anybody practicing it on a regular basis.

Yoga is a perfect way to ensure overall health and physical fitness. Through meditation, breathing exercises (called pranayams); you can banish all your stress and lead a healthy life. In fact, it is one of the best remedies known to humankind, for curing chronic ailments that are otherwise difficult to be cured by other medications. People suffering from backaches and arthritis are often suggested to do asanas that concentrate on the exercise of the muscles at the strategic locations. Pranayamas are the best breathing exercises to increase the capacity of lungs.

The amazing thing about Yoga is that its positive effects on the health and mind are visible over time. Another specialty about Yoga is its wide choice of asanas. Depending upon the stamina and overall health, you can choose from the mild pranayamas and asanas to high-intensity asanas. It is a medication without the actual use of medicines. Moreover, no visible side effects are associated with the practice of Yoga on a regular basis. All you need to know is the most appropriate asanas according to the ability and structure of your body. Also, you need to know the right way of performing the asanas, because any wrong attempt can cause sprains and injuries.

Conscious connection to something allows us to feel and experience that thing, person, or experience. The experience of connection is a state of yoga, a joyful and blissful, fulfilling experience.

There is no single definition of yoga. To experience truth through yoga, we must study its classical definitions and reflect on our understanding of it.

If we wish to connect to the intuitive, creative part of us and realize the eternal Self, we need to consider what yoga really is. Each definition of yoga reveals a part of the ocean of knowledge and experience that forms the yogic path.



Fig. . Bhujangasana in Yoga

YOGA : ITS ORIGIN, HISTORY AND DEVELOPMENT.

Unit Objectives

At the end of this unit, you will be able to:

1. Explain the roots of Yoga in India
2. Describe the history & evoluion of Yoga
3. Describe the journey of Yoga from India to the World
4. Explain the contribuion of Yog Gurus in spreading Yoga to the World

The land of Yoga

The science of Yoga has its origin thousands of years ago, long before the first religion or belief systems were born. According to Yogic lore, Shiva is seen as the first yogi or ādiyogi and the first guru or ādiguru. Several thousand years ago, on the banks of Lake Kanisarovar in the Himalayas, ādiyogi poured his profound knowledge into the legendary saptarishis or "seven sages". These sages carried this powerful Yogic science to different parts of the world including Asia, the Middle East, northern Africa and South America. Interestingly, modern scholars have noted and marvelled at the close parallels found between ancient cultures across the globe. However, it was in India that the Yogic system found its fullest expression. Agastya, the saptarishi who travelled across the Indian subcontinent, crafted this culture around a core Yogic way of life.



Fig. India - Land of Yoga

Yoga is widely considered as an "immortal cultural outcome" of the Indus-Saraswai Valley Civilisaion daing back to 2700 BC – and has proven itself to cater to both material and spiritual uplift of humanity. A number of seals and fossil remains of Indus-Saraswai Valley Civilisaion with Yogic moifs and figures performing Yoga sādhanā suggest the presence of Yoga in ancient India. The seals and idols of Mother Goddess are suggesive of Tantra Yoga.

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The presence of Yoga is also available in folk traditions, Vedic and Upanishadic heritage, Buddhist and Jain traditions, Darshan, Ramayana, epics of Mahabharata including Bhagavad Gita and theistic traditions of Shaivas, Vaishnavas and Tantric traditions. Though Yoga was being practiced in the pre-Vedic period, the great sage Maharishi Patanjali systematized and codified the then existing Yogic practices, its meaning, and its related knowledge through Patanjali's Yoga Sutras.

After Patanjali, many sages and Yoga masters contributed greatly to the preservation and development of the field through well-documented practices and literature. Yoga has spread to all over the world by the teachings of eminent Yoga masters from ancient times to the present date. Today, everybody has conviction about Yoga practices towards the prevention of disease, maintenance, and promotion of health. Millions and millions of people across the globe have benefited from Yoga, and the practice of Yoga is blossoming and growing more vibrant with each passing day.

History and Evolution of Yoga

There are many theories associated with Yoga. It is mentioned in Rig Veda, and its evidence was found in the oldest civilization of Indus-Saraswati, which is considered to be more than 5000 years old (3000 B.C.), it means Yoga is older than 5000 years. It was invented by '*Rishi Munis*' for doing meditation, but apart from that, it has a very good effect on the body. During the journey of more than 5000 years, Yoga evolved in many forms. As explained earlier, mainly it has following four paths -

- Jnana Yoga
- Bhakti Yoga
- Karma Yoga
- Raj Yoga

After Vedic Period, the great 'Maharishi Patanjali' created systems in Yoga. He created text which was named as 'Patanjali Yoga Sutras'. Although many other Sages or 'Rishis' contributed in the development of Yoga, but the effect of 'Maharishi Patanjali' is greatest. Due to that evolution of Yoga is divided into the following periods -

1. Pre-Patanjali Period (Before 500 BC)
2. Patanjali Period (500 BC to 800 AD)
3. Post Patanjali Period (800 AD onwards)



Fig.. Maharishi Patanjali

- 1- **Pre-Patanjali Period (Before 500 BC)** - It is also called as Veda Era since all Veda and Upanishads were written during this period.

Veda - These are the text which contains hymns, philosophy, and guidance for life. These are written in Sanskrit, which is considered to be the mother of all languages. The writer of Vedas are unknown, and it is considered to be the oldest written documents by a human. There are four Vedas -

- 1- Rigveda
- 2- Yajurveda
- 3- Atharvavda 4- Samveda

Upanishads - Meaning of Upanishads is 'Sitting down on feet' which means getting 'shiksha' or education. These are the essence of Vedas. There are more than 200 Upanishads available.



Fig. 1.2.3. 'Pandulipi' of Veda

- 2- **Patanjali Period (500 BC to 800 AD)** - Maharishi Patanjali compiled all Yoga in a book called 'Yog sutras'. This book has total 196 sutras or formula. The Book has four segments, called - Samadhi Pada, Sadhana Pada, Vibhuti Pada, Kaivalya Pada.

Samadhi Pada - In this segment Patanjali explains about Samadhi. Sadhana Pada - In this segment he explains about meditation.

Vibhuti Pada - In this segment Patanjali explains about yoga.

Kaivalya Pada - In this segment Patanjali explains the connection of yoga with Body, mind, and soul. There are many exercises explained in this segment which can unite all of these.

- 3- **Post-Patanjali Period (800 AD onwards)** - Period after Patanjali Period, which covers current period also, is called Post-Patanjali period. After Patanjali, there were many Yogis and Sants, who developed Yoga. With their own personal style, they created a new form of Yoga, but the basic form of Yoga is same in all the styles.

Modern Yoga is also called '*Hath Yoga*' or physical Yoga. This is also related to '*Kundalini Yoga*' which is part of '*Raja Yoga*'. Modern Yoga is a mix of all the four paths of Yoga and gives more stress on postures. For getting complete benefits of Yoga, one should have a holistic approach towards it, even without any religious inclination.



Fig. 1.2.4. Garudasan

Journey of Yoga from India to the World

For many, the practice of yoga is restricted to Hatha Yoga and Asanas (postures). However, among the Yoga Sutras, just three sutras are dedicated to asanas. Fundamentally, hatha yoga is a preparatory process so that the body can sustain higher levels of energy. The process begins with the body, then the breath, the mind to the inner self.

Yoga is also commonly understood as a therapy or exercise system for health and fitness. While physical and mental health is natural consequences of yoga, the goal of yoga is more far-reaching. "Yoga is about harmonizing oneself with the universe. It is the technology of aligning individual geometry with the cosmic, to achieve the highest level of perception.

Yoga does not adhere to any particular religion, belief system or community; it has always been approached as a technology for inner well-being. Anyone who practices yoga with involvement can reap its benefits, irrespective of one's faith, ethnicity or culture.

Traditional Schools of Yoga: Different Philosophies, Traditions, lineages and Guru-shishya traditions of Yoga lead to the emergence of different Traditional Schools of Yoga e.g. Jnana-yoga, Bhakti-yoga, Karma-yoga, Dhyana-yoga, Patanjali-yoga, Kundalini-yoga, Hatha-yoga, Mantra-yoga, Laya-yoga, Raja-yoga, Jain-yoga, Buddha-yoga, etc. Each school has its own principles and practices leading to ultimate aim and objectives of Yoga.

Contribution of Yoga Gurus in Spreading Yoga

Yoga has spread all over the world by the teachings of great personalities like Swami Shivananda, Shri T.Krishnamacharya, Swami Kuvalayananda, Shri Yogendra, Swami Rama, Sri Aurobindo, Maharshi Mahesh Yogi, Acharya Rajanish, Pattabhi Jois, BKS. Iyengar and Swami Satyananda Sarasvati. B.K.S. Iyengar was the founder of the style of yoga known as "Iyengar Yoga" and was considered one of the foremost yoga type. In modern days, Sri Sri Ravishankar & Swami Ramdev has contributed a lot in spreading Yoga to the common household.

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Fig. Virkshasana Pose

Yoga Terminology and Their Meaning

Unit Objectives

At the end of this unit, you will be able to:

1. Describe the common Yoga terms
2. Explain the meaning of common terminology of Yoga

Common Terminology used in Yoga

Asana: Body Posture in Yoga Ashtanga:

One of the major Yoga path, which has eight limbs Ayurveda: Ancient Indian Science of medicines

Bandha: Internal Lock which is used during yoga Chakra: Seven energy centers of Body



Fig. 1.3.1. Seven Chakras

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Dosh: Body types as per Ayurveda, Pitta (Fire), Vata (Air) and Kapha (Earth) Hatha Yoga: A type of Yoga Path Mudra: Hand Gesture during Yoga Practice.



Fig. Hast Mudra in Yoga

Mantra: Groups of words, chanted for creating positive environment Meditation or Dhyana: Practice of controlling and focusing the mind and process of self-awakening Nadi: This is an Energy channel as per Vedic Beliefs, in which 'Prana' flows Ojas: The subtle energy created in body by discipline of chastity Om or AUM: The original universal syllable as per Vedic beliefs



Fig. Om or Aum

Patanjali : Indian Sage who compiled all Yoga Sutras, which were earlier scattered in different forms

Pranayama : Types of Breathing exercises in Yoga Practices Props : Tools which are used for assisting yogis in doing yoga practice - for ex. Mat, Straps, etc.

Power Yoga : It is a type of Ashtanga Yoga which has more focus on Fitness Sacrum : A triangular shaped Bone situated at the base of Spine



Fig Sacrum Bone

Samadhi: A state of meditation Sadhana: Spiritual discipline for getting Siddhi Shani: it means Peace and very frequently chanted during Yoga Practice Shodhana: A purification process in Hatha Yoga Sutras: Classical text for Yoga created by Yogis Sushma Nadi: The Central Prana Current Svadhyaya: Self Study Ujjayi: Sound of breath, taken from a slightly constricted throat Upanishad: Ancient Vedic Text written by Indian Sages Vinyasa: A body movement linked with breath Yogi or Yogini: Disciple of Yoga

Basic Rules of Yoga

Like any other activity, Yoga also has some basic rules. These rules should be followed in order to get optimum results from yoga. Some of the basic rules are stated below.

Age for yoga

Yoga has no age limitation. Person of any age can perform Yoga. Only some type of Yoga is associated with age

Ideal Place for Yoga

It is advisable to practice Yoga in a quiet and properly ventilated room. You can also practice Yoga outdoors, amidst trees and flowers.

Avoid practicing Yoga during colds, strong winds, smoky or dirty atmosphere. Make sure your Yoga mat is surrounded by much space to avoid any sort of accidents while practicing Yoga poses like Sirshasana. Refrain from practicing under an electric fan, if it is not too hot.

Ideal Clothes for Yoga

Wear loose, light and comfortable clothes during yoga practice. It should be ensured that clothes are covering body appropriately as per your cultural beliefs.

Remove your spectacles, watches or any jewellery before starting the Asanas. It can harm you while doing yoga.

Yoga Mat for Exercise

Yoga mats made of natural materials as well as folded blankets can be used for doing Yoga. Blankets work as good insulators between your body and earth. We should avoid spongy or air-filled mattresses as they do not provide the required support to the spine.

Ideal Diet for Yoga

There is no specification or dietary rule for Yoga. Eat natural food filled with nutrients.

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It does not require one to be vegetarian to practice Yoga.

However, in the advanced level of yoga, it is recommended to lead a vegetarian life. It is advised to fill half of the stomach with food, one-quarter with water and to keep the remaining quarter empty. This practice keeps the body fit and active. Details on diet are given in Yogic Diet.

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Condition of Stomach

It is highly recommended that your stomach is empty while doing yoga. That is why Yoga is normally practiced during morning hours after emptying the stomach. If that is not possible, then at least give 3- 4 hour gap after your last meal for doing yoga.

In the morning create a schedule of waking up at fixed time and empty your bowl before doing yoga. After some time it would become natural, and you would need not to force your body for that.

Way of breathing

During Yoga, you should breathe through your nose, not from the mouth. It is very important in order to get full benefits of Yoga.

Body Condition While Doing Yoga

While doing Yoga, one's body should be free from fever or any other disease. If he / she is suffering from any disease, he / she should consult his / her doctor before practicing Yoga.

While doing Yoga one's body should be relaxed and calm.

Asanas in Inverted Position

The female practitioner should avoid doing any type of inverted position yoga, such as Shirshasan or Sarvangasan, during periods. This can harm their body.

Pain in Body while Doing Yoga

Initially, the body tends to pain since it would be in stiff condition. But if pain is unbearable then you should immediately stop yoga and inform your instructor about that.

Do's of Yoga

- "Early to bed and early to rise makes a man healthy, wealthy and wise" is a universal adage. Yoga practitioners should go to bed early, have a sound sleep and get up early in the morning, attend to nature's call, wash the mouth and teeth thoroughly, take a bath and start yoga in fasting mode. It is advisable that one should wake up and practice Yoga in 'Brahm Muhurat' which is from 4:24 am to 5:24 am.
- Yoga can also be practiced 1 hour after a liquid diet, 3 hours after refreshments or 5 hours after full meals.
- One could practice, yoga even before bath but, after practice one should wait for some time and then take a bath.
- Yoga should be practiced on a leveled floor in a room where doors and windows are kept open for air and light.

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- It is helpful in many ways to practice yoga in a place, where morning tender sunrays fall.
- One should not practice yoga directly on the ground, on cement or mortar floor. One should spread a carpet, a blanket or a clean cloth, sit on it and start yoga practice by facing east or north in the morning, west or south in the evening.

Streams of Yoga

Primarily, Yoga has four paths. Bhagvad Gita has details on these four paths. These four paths are listed below -

- 1- Raj Yoga, 2- Bhakti Yoga, 3- Jnan Yoga, 4- Karma Yoga All the four paths have their own renowned followers. We will discuss the same in detail.

Raj Yoga

The great sage Patanjali was a follower of Raj Yoga. In Raj Yoga, Yoga is practiced to gain mastery over the mind through will power. There are further two branches under *Raj Yoga*:

- 1- Bahiranga Yoga 2- Antaranga Yoga

Bahiranga Yoga

Bahiranga means external. So Bahiranga Yoga means External or Outer Path of Yoga. It is controlled by four limbs of Ashtang yoga - yama, niyama, asana, and pranayama. Sometimes the fifth limb - pratyahara, is also associated with this

Antaranga Yoga

Antaranga means internal. So Antaranga Yoga means internal or inner Path of Yoga. It is controlled by last three limbs of Ashtang yoga - dharana, dhyana, and samadhi.

As the name suggest, benefits of this yoga is internal rather than external. It awakens the mind and soul of Yogi.

Bhakti Yoga

Ramanuja was main follower of Bhakti Yoga. Bhakti yoga aims to help a person evolve emotional maturity, love for society and to spread the message of universal brotherhood and oneness. It helps in transformation of the conditional and desirous form of love into true unconditional love. Kama (desire), combined with tyaga (sacrifice) forms prema (love). Prema along with saranagati (surrender) results in bhakti. The path of bhakti yoga leads to satisfaction and calmness of mind. It is considered to be the easiest path among four, as the practice is not very rigorous. Bhakti yoga is similar to the interpersonal relation between humans but here the relation is between soul and super soul (ultimate soul). Bhagvad purana provides us with nine forms of bhakti:

1. Sravan (listening)
2. Kirtana (praising)
3. Smarana (remembering)
4. Pada- sevasna (rendering service)
5. Archana (worshipping)

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6. Vandana (paying homage),
7. Dasya (servitude)
8. Sakhya (friendship)
9. Atma-nivedana (complete surrender of self).



Fig. 1.1.6. Bhakti Yoga

Janan Yoga

One of the famous follower of this stream was Shankara. This path helps in developing a logical mind with intuitive knowledge and immense awareness. There are three phases in jananyoga:

1. Sravana, the first exposure to knowledge in any form (reading a book, listening to a lecture, watching a video).
2. Manana, revisiting the knowledge for further understanding.
3. Nididhyasana, the phase of experimentation.

In janan yoga, the ultimate aim is to understand the reality of atma (soul) and the ability to differentiate it from the body. A person truly established in the path of janan yoga becomes free from all worldly desires and achieve contentment. Though the four paths of yoga seem to be completely different from each other, they lead to the same goal of self-realization, and the union of the individual with the universal self.

Karma Yoga

The Bhagvad gita remains the main source for the conceptual basis of karma yoga; it was later elaborated by Swami Vivekananda. This path emphasizes on performing actions with detachment without worrying about the results.

Actions are categorized as:

Tamasik - they are binding, deteriorating, violent and is a result of state of delusion and confusion

Rajasik - when performed with craving for desires, with egoism and a lot of efforts

Sattvik - when it is free from attachment and done without love or hatred

The essence of karma yoga is to convert kamyakarma (action with desires) into yogic karma by

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inculcating detachment and committing one's energy to unceasing work.

Eight Limbs of Ashtang Yoga

The meaning of Ashtanga yoga is 'Eight-limbed yoga'. According to Patanjali, the path of internal purification for revealing the Universal Self consists of the following eight spiritual practices:

Yama: Universal morality Niyama: Personal observances Asanas: Body postures

Pranayama: Breathing exercises and control of prana Pratyahara: Control of the senses

Dharana: Concentration and cultivating inner perceptual awareness Dhyana: Devotion, Meditation on the Divine

Samadhi: Union with the Divine

The first two limbs that Patanjali describes are the fundamental ethical precepts called yamas and the niyamas. These can also be looked at as universal morality and personal observances. The Yamas and niyamas are the suggestions given on how we should deal with people around us and our attitude toward ourselves. The attitude we have towards things and other people is yama, how we relate to ourselves inwardly is niyama. Both are mostly concerned with how we use our energy in relationship to others and ourselves.

The yamas are broken down into five "wise characteristics." Rather than a list of dos and don'ts, "they tell us that our fundamental nature is compassionate, generous, honest and peaceful."

They are as follows:

Yamas (Universal Morality)

1. **Ahimsa** – Compassion for all living things The word ahimsa literally mean not to injure or show cruelty to any creature or any person in any way whatsoever. Ahimsa is, however, more than just lack of violence as adapted in yoga. It means kindness, friendliness, and thoughtful consideration of other people and things. It also has to do with our duties and responsibilities too. Ahimsa implies that in every situation we should adopt a considerate attitude and do no harm.
2. **Satya** – Commitment to Truthfulness Satya means "to speak the truth", yet it is not always desirable to speak the truth on all the occasions, for it could harm someone unnecessarily. We have to consider what we say, how we say it, and in what way it could affect others. If speaking the truth has negative consequences for another, then it is better to say nothing. Satya should never come into conflict with our efforts to behave with ahimsa. This precept is based on the understanding that honest communication and action form the bedrock of any healthy relationship, community or government, and deliberate deception, exaggerations, and lies harm others.
3. **Asteya** - Non-stealing: Steya means "to steal"; while Asteya is -to take nothing that does not belong to us. This also means that if we are in a situation where someone entrusts something to us or confides in us, we do not take advantage of him or her. Non-stealing includes not only not taking what belongs to another without permission, but also using something for a different purpose to that intended, or beyond the time permitted by its owner. The practice of asteya implies not taking anything that has not been freely given.

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4. **Brahmacharya** - Sense control: Brahmacharya is used mostly in the sense of abstinence, particularly in relationship to sexual activity. Brahmacharya suggests that we should form relationships that foster our understanding of the highest truths. Brahmacharya does not necessarily imply celibacy. Rather it means responsible behavior with respect to our goal of moving towards the truth. Practicing Brahmacharya means that we use our sexual energy to regenerate our connection to our spiritual self. It also means that we don't use this energy in any way that might harm others.
5. **Aparigraha** - Neutralizing the desire to acquire and hoard wealth: Aparigraha means to take only what is necessary and not to take advantage of a situation or act greedy. We should only take what we have earned; if we take more, we are exploiting someone else. The yogi feels that the collection or hoarding of things implies a lack of faith in God and in himself to provide for his future. Aparigraha also implies letting go of our attachments to things and an understanding that impermanence and change are the only constraints.

The Yoga Sutra describes what happens when these five behaviors outlined above becomes part of a person's daily life. Thus, the yamas are the moral virtues which if attended to, purify human nature and contribute to the health and happiness of the society.

Niyama (Personal Observances):

Niyama means "rules" or "laws." These are the rules prescribed for personal observance. Like the yamas, the five niyamas are not exercises or actions to be simply studied. They represent far more than an attitude. Compared with the yamas, the niyamas are more intimate and personal. They refer to the attitude we adopt toward ourselves as we create a code for living soulfully.

1. **Sauca - Purity** - The first niyama is sauca, means purity and cleanliness. Sauca has both an inner and an outer aspect. Outer cleanliness simply means keeping ourselves clean. Inner cleanliness has as much to do with the healthy, free functioning of our bodily organs as with the clarity of our mind. Practicing asanas or pranayama are essential means for attending to this inner sauca. Asanas tone the entire body and remove toxins while pranayama cleanses our lungs, oxygenates our blood and purifies our nerves. But more important than the physical cleansing of the body is the cleansing of the mind of its disturbing emotions like hatred, passion, anger, lust, greed, delusion and pride.
2. **Santosa** - Contentment: Another niyama is santosa, modesty and the feeling of being content with whatever we have. To be at peace within and finding contentment with one's lifestyle, even while experiencing life's difficulties through all kinds of circumstances. We should accept that there is a purpose for everything - yoga calls it karma - and we cultivate contentment 'to accept what happens'. It means being happy with what we have rather than being unhappy about what we don't have.
3. **Tapas** - Disciplined use of our energy: Tapas refers to the activity of keeping the body fit or to confront and handle the inner urges without an outer show. Literally, it means to heat the body and by doing so, to cleanse it. Behind the notion of tapas lies the idea that we can direct our energy to enthusiastically engage life and achieve our ultimate goal of union with the Divine. Tapas helps us burn up all the desires that stand in our way of this goal. Another form of tapas is paying attention to what we eat. Attention to body posture, attention to eating habits, attention to breathing patterns - these are all tapas.

4. **Svadhyaya** – Self study : The fourth niyama is svadhyaya. Sva means "self" adhyaya means "inquiry" or "examination". Any activity that cultivates self-reflective consciousness can be considered svadhyaya. It means to find self-awareness in all our activities and efforts, even to the point of welcoming and accepting our limitations. It teaches us to be centered and non-reactive to the dualities, to burn out unwanted and self-destructive tendencies.
5. **Isvarapranidhana** - Celebration of the Spiritual: Isvarapranidhana means "to lay all your actions at the feet of God." It is the contemplation of God (Isvara) to become attuned to god and god's will. It is the recognition that the spiritual suffuses everything, and through our attention and care, we can attune ourselves with our role as a part of the Creator. The practice requires that we set aside some time each day to recognize that there is some omnipresent force larger than ourselves that is guiding and directing the course of our lives.



Fig. Yoga is for everyone

Unity in Diversity

Unity in diversity is a concept of 'unity without uniformity and diversity without fragmentation that shifts focus from unity based on a mere tolerance of physical, cultural, linguistic, social, religious, political, ideological and/or psychological differences towards a more complex unity based on the understanding that difference enriches human interactions

- One should practice yoga calmly without any haste or exhaustion. If one is tired, he or she should rest for a while in a comfortable posture.
- One should try to practice yoga everyday regularly, preferably at the same time.
- While practicing yoga, one should concentrate on yoga alone and try to keep away the other thoughts.
- During the practice of Yoga asanas, the dirt in the internal organs of the body is directed towards the urinary bladder, So soon after completing yoga, one should pass out the urine.
- During yoga practice, if anyone feels to attend nature's call, he must go and attend to it immediately. One should not hold it back forcefully for a long time. One should also not try to suppress sneezing, cough, etc. If one feels thirsty one can drink a little water as well.
- If one sweats during yoga practice, he or she should slowly wipe it out either with a cloth or with the palms. It is better if it dries up automatically in the air.
- Pranayama should follow the asanas and meditation should follow Pranayama.

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- Always lay on your back for 2 to 5 minutes with relaxed breathing, after finishing Yoga postures.
- Movements should be slow in every case. Sudden movements should be avoided.

Don'ts of Yoga

- Women should refrain from regular yoga practice during their menses or pregnancy. However, for them there are a specific set of asanas to be done.
- Don't have a full tummy while doing yoga, wait until 2 to 3 hours after large meals.
- Don't take a shower or drink water for 30 minutes after doing yoga.
- During illness, after operations, when there is a bandage either for sprains or fractures, one should refrain from Yoga Practice. They can resume yoga after consulting experts.
- Don't do strenuous exercises after yoga.
- One should not practice yoga in unclean/smoky place and areas with a foul smell.
- Yoga should not be practiced in storm winds either.

Major Benefits of Yoga

Following are some of the benefits of doing Yoga. We will discuss effects of Yoga on different parts of the body in detail in subsequent chapters -

- 1- Improvement in immunity - Protection from diseases
- 2- Healthy Heart - Protection from Heart Problems
- 3- Improved body flexibility - Protection from Injury
- 4- Improved Body posture - Better personal image
- 5- Positivity in mind - Protection from Hypertension, depression, etc.
- 6- Weight reduction / Weight increase - Body attain ideal Body weight
- 7- Improved Muscle Strength
- 8- Improved Vitality



Fig. 1.1.8. Healthy Body & Mind Through Yoga

Excercise

Q1. The Meaning of Yoga is the union of:

- a. Human & God
- b. Human & Yoga
- c. Body & Yoga
- d. All of the above

Q2. Following is the organ which gets benefitted by Yoga:

- a. Heart
- b. Brain
- c. Backbone
- d. All of the above

Q3. Which of following is not a stream of Yoga:

- a. Janan Yoga
- b. Ved Yoga

Q4. Ancient Indian medicine system is called:

- a. Allopathy
- b. Homeopathy
- c. Ayurveda
- d. Unani

Q5. Following is not Dosh as per Ayurveda:

- a. Vata
- b. Pitta
- c. Kapha

Q6. Which of these area of Yoga Center should be maintained well:

- a. Reception Area
- b. Yoga Room
- c. Toilets
- d. All of the above

Raj Yoga

- c. Bhaki Yoga

2. Introduction to Yoga Tests

- Introduction and study of Patanjala Yoga Sutra including memorization of selected Sutras (P.Y.S. 1/2,14,2/1,27,29, 46,47,49)
- Introduction and study of Bhagavad Gita including memorization of selected Slokas (B.G. 2/47,48,50 3/13)
- Concept of Aahara (Diet) according to Yogic texts
- Significance of Hath Yoga practices in Health promotion
- Concept of mental well being according to Patanjali Yoga
- Yogic practices of Patanjali Yoga: Bahiranga and Antaranga Yoga
- Concept of healthy living in Bhagwad Gita
- Importance of subjective experience in daily Yoga Practice

Key Learning Outcomes

At the end of this module, you will be able to:

1. Describe Yoga principles
2. Explain various important ancient texts
3. Explain about human body anatomy
4. Explain Yogic diet
5. Demonstrate key Yoga exercises

Describe the benefits and the precautions for each Yoga Asana

UNIT 2.1: Yoga Principles and Knowledge of Ancient Texts

Unit Objectives

At the end of this unit, you will be able to:

1. Describe Yoga principles
2. Explain various important ancient texts
3. Describe the Bhagvad Gita
4. Describe the Patanjali's Yoga Sutra
5. Describe the concept of Veda & the Upanishad
6. Describe the Ramayana
7. Describe the Narada Bhakti sutra

2.1.1. Yoga Principles

Following are the ten Yoga Principles -

1. Non-violence (Ahimsa)
2. Truthfulness (Satya)
3. Righteousness (Asteya)
4. Wisdom (Brahmacharya)
5. Simplicity (Aparigraha)
6. Worship of the spiritual goal (Ishvara-pranidhana)
7. Sacrifice the ego (Shaucha)
8. Self-discipline (Tapas)
9. Reading (Svadhyaya)
10. Contentment (Santosha)

2.1.1.1 Meaning of Yoga Principle

Non-violence (Ahimsa)

No killing of other beings. To be meek and peaceful.

Truthfulness (Satya)

Live in the truth. Basically, be honest with yourself and others. Also there should be no little lies of convenience. A lie is permissible only in well-justified situations, for example, if you can save the life of another human being with a lie. A Yogi is silent whenever in doubt. Those who consistently live in the truth, radiate truth. Their fellow men trust them.

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Righteousness (Asteya)

Neither stealing nor cheating. A Yogi is always honest. He does not seek unwarranted advantages, but he is looking for a fair trade.

Wisdom (Brahmacharya)

Live in the spiritual light. Do not serve the money but your inner happiness. Be centered in your inner happiness and peace.

Simplicity (Aparigraha)

Be moderate in external enjoyment and consumption. A spiritual person lives modestly outwardly and inwardly rich. A Yogi uses his energy, not in outer actions but lives so peacefully that it turns inward and cleanses his body from the inside. One day, he lives permanently in the spiritual light.

Worship of the spiritual goal (Ishvara-pranidhana)

So that we do not lose our spiritual path, it is necessary that we remind ourselves again and again about our spiritual goal. We can worship any image (Goddess, Shiva, Patanjali), we can bow before a statue (Buddha, Jesus, Shiva) or speak a mantra (prayer).

Sacrifice the ego (Shaucha)

Purification/cleaning. The way into the light passes through the crucifixion of the ego. Without a crucifixion, there is no enlightenment. True sacrifice is an art. He who sacrifices too much braces them internally. Who sacrifices too little, does not solve his tensions.

Self-discipline (Tapas)

A clear goal, a clear life plan and a clear way of practicing. Tapas means to lead a disciplined life.

Reading (Svadyaya)

Daily reading (mantra, meditation) keeps us on the spiritual path, cleanses our spirit, connects us with the enlightened masters and makes us spiritual victors.

Contentment (Santosha)

Satisfied with what one has.

2.1.2 Knowledge of Ancient Yoga Text

In order to have a deeper knowledge of Yoga, one should have a good understanding of ancient Yoga texts. Some of the important Yoga texts are given below -

- 1- Bhagavad Gita
- 2- Patanjali Yoga Sutra
- 3- The Ramayana
- 4- Narad Bhakti Sutra

Bhagavad Gita

The Geeta is the linchpin of a great epic, and that epic is the Mahabharata or Great Story of the Bharatas. With nearly one hundred thousand verses divided into eighteen chapters, it is one of the longest epic poems in the world— seven times longer than the Iliad and the Odyssey combined, or

three times longer than the Bible. It is, in fact, a whole library of stories that exerted a tremendous influence on the people and literature of India.

The central story of the Mahabharata is a conflict over succession to the throne of Hastinapura, a kingdom just north of modern Delhi that was the ancestral realm of a tribe most commonly known as the Bharatas. (India was at that time divided amongst many small, and often warring kingdoms)

The struggle is between two groups of cousins, the Pandavas or sons of Pandu, and the Kauravas, or descendants of Kuru. Because of his blindness, Dhritarashtra, the elder brother of Pandu, is passed over as king, the throne going instead to Pandu.

However, Pandu renounces the throne, and Dhritarashtra assumes power after all. The sons of Pandu—Yudhishthira, Bhima, Arjuna, Nakula, and Sahadeva—grow up together with their cousins, the Kauravas. Due to enmity and jealousy, the Pandavas are forced to leave the kingdom. During their exile, they jointly married Draupadi and befriend their cousin Krishna, who from then on accompanies them. They return and share sovereignty with the Kauravas, but have to withdraw to the forest for thirteen years when Yudhishthira loses all his possessions in a game of dice with Duryodhana, the eldest of the Kauravas. When they return from the forest to demand their share of the kingdom back, Duryodhana refuses. This means war. Krishna acts as counselor to the Pandavas.

The Gita is found right here, with the two armies facing each other and ready for battle. The battle rages for eighteen days and ends with the defeat of the Kauravas. All the Kauravas die; only the five Pandava brothers and Krishna survive. The six set out for heaven together, but all die on the way, except Yudhishthira, who reaches the gates of heaven accompanied only by a small dog, who turns out to be an incarnation of the god Dharma. After tests of faithfulness and constancy, Yudhishthira is reunited in heaven with his brothers and Draupadi in eternal bliss.

It is within this enormous epic, which is less than one percent of the Mahabharata, that we find the Bhagvad Geeta, or the Song of the Lord, most commonly referred to simply as the Gita. It is found in the sixth chapter of the epic, just before the great battle between the Pandavas and the Kauravas. The greatest hero of the Pandavas, Arjuna, has pulled up his chariot in the middle of the battlefield between the two opposing armies. He is accompanied by Krishna, who acts as his charioteer.

In a fit of despondency, Arjuna throws down his bow and refuses to fight, deploring the immorality of the coming war. It is a moment of supreme drama: time stands still, the armies are frozen in place, and God speaks.



Fig. 2.1.1. The Bhagvad Geeta

The situation is extremely grave. A great kingdom is about to self-destruct in internecine warfare, making a mockery of dharma, the eternal moral laws, and customs that govern the universe. Arjuna's objections are well-founded: He is the victim of a moral paradox. On the one hand, he is facing persons who, according to dharma, deserve his respect and veneration. On the other hand, his duty as a warrior demands that he kill them.

Yet no fruits of victory would seem to justify such a heinous crime. It is, seemingly, a dilemma without a solution. It is this state of moral confusion that the Gita sets out to mend.

When Arjuna refuses to fight, Krishna has no patience with him. Only when he realizes the extent of Arjuna's despondency does Krishna change his attitude and start teaching the mysteries of dharmic action in this world. He introduces Arjuna to the structure of the universe, the concepts of prakriti, primordial nature, and the three gunas, the properties that are active in prakriti. Then he takes Arjuna on a tour of philosophical ideas and ways of salvation. He discusses the nature of theory and action, the importance of rituals, the ultimate principle, Brahman, all the while gradually disclosing his nature as the highest god.

This part of the Gita culminates in an overwhelming vision: Krishna allows Arjuna to see his supernal form, the Vishvarupa, which strikes terror into Arjuna's heart. The rest of the Gita deepens and supplements the ideas presented before the epiphany—the importance of self-control and faith of equanimity and unselfishness, but above all, of bhakti or devotion. Krishna explains to Arjuna how he can obtain immortality by transcending the properties which qualify not only primordial matter but also human character and behavior. Krishna also emphasizes the importance of doing one's duty, declaring that it is better to do one's duty without discrimination.

In the end, Arjuna is convinced. He picks up his bow and is ready to fight. Knowing a couple of things will make your reading easier. The first is that the Gita is a conversation within a conversation. Dhritarashtra begins it by asking a question, and that is the last we hear out of him. He is answered by Sanjaya, who relates what is happening on the battlefield. (Dhritarashtra is blind. Vyasa, his father, offers to restore his sight so he can follow the battle. Dhritarashtra declines this boon, feeling that seeing the carnage of his kinsmen would be more than he could bear. So instead, Vyasa bestows clairvoyance and clairaudience upon Sanjaya, Dhritarashtra's minister, and charioteer. As they sit in their palace, Sanjaya relates what he sees and hears on the distant battlefield.) Sanjaya pops up now and again throughout the book as he relates to Dhritarashtra the conversation between Krishna and Arjuna. This second conversation is a bit one-sided, as Krishna does almost all of the talking. Thus, Sanjaya describes the situation, Arjuna asks the questions, and Krishna gives the answers.



Fig. 2.1.2. Shree Krishna & Arjun in Mahabharat

The eighteen chapters of the Bhagavadgita are classified as 'yogas', starting with the 'yoga' of Arjuna's depression and ending with the yoga of 'liberation through renunciation'. The eighteen chapters are:

Chapter 1: Arjunavishadayoga - The Yoga of The Despondency of Arjuna Chapter 2: Sankhyayoga - The Yoga of Knowledge Chapter

3: Karmayoga - The Yoga of Action

Chapter 4: Jnanakarmasannyasayoga - The Yoga of Knowledge as well as the Disciplines Of action and Knowledge

Chapter 5: Karmasannyasayoga - The yoga of Action and knowledge Chapter 6: Atmasayamayoga - The yoga of Self-Control Chapter

7: Gyanavigyanayoga - Knowledge of manifest Divinity Chapter

8: Aksharabrahmayoga - The Yoga of The Imperishable Brahman

Chapter 9: Rajavidyarakshasagadhyayoga - The yoga of Sovereign Science and the Sovereign Secret Chapter 10: Vibhuyoga - The Yoga of The Divine Glories Chapter

11: Visvarupadarshanayoga - The Yoga of The Vision of the Cosmic Form Chapter

12: Bhaktiyoga - The Yoga of Devotion

Chapter

13: Kshetrakshetravibhagayoga - The Yoga of The Distinction Between the Field and the Knower of the Field

Chapter 14: Gunatrayavibhagayoga - The Yoga of The Division of the Three Gunas Chapter 15: Purushottamayoga - The Yoga of The Supreme Spirit

Chapter 16: Daivasurasampadvibhagayoga - The Yoga of The Division Between the Divine and the Demonic

Chapter 17: Shraddhatrayavibhagayoga - The Yoga of The Division of the Threefold Faith Chapter 18: Mokshasannyasayoga - The Yoga of Liberation By Renunciation

Patanjali's Yoga Sutras

For most people, the word “yoga” brings to mind the image of a yoga model that appears on the cover of a yoga magazine in a pose. Yoga is commonly practiced as a routine which helps in improving physical fitness and sometimes as a means to stress management. There is growing awareness that yoga can be effectively used as therapy in treating a variety of ailments, including hypertension, diabetes, heart conditions, etc. Those who have been practicing yoga for a while can attest to the physical and physiological benefits that the practice brings.

While all the above-mentioned benefits of yoga are certainly desirable, as a Yoga Instructor you should know about the true meaning and purpose of yoga which is “the ability to control the fluctuations of the mind”. This brief and succinct definition was given by Sage Patanjali, more than three thousand years ago, in the Yoga Sutras of Patanjali. In the Yoga Sutras, Patanjali has provided a very scientific and practical exposition of the philosophy and practice of yoga. One very important section of the book describes what is commonly called “ashtanga yoga” or the Eight Limbs of Yoga which provides practical guidelines for achieving the goal of yoga, i.e., controlling the mind.

Most of the yoga as it is practiced today, called Hatha Yoga, includes physical postures (asanas) and some breathing techniques (pranayama). As you can notice from the eight limbs which are listed below, asana and pranayama are only two of these eight limbs and help establish a strong foundation towards achieving the objectives of yoga. However, to develop a fully integrated practice of yoga and achieve the final objectives of yoga, one needs to include in their routine all the eight limbs of yoga in some form.

Overview of Yoga Sutras

Even though yoga has been mentioned in various ancient texts, including the Vedas, Upanishads, the Bhagavad Gita, etc., the credit for putting together a formal, cohesive philosophy of yoga goes to Sage Patanjali. In his Yoga Sutras, Patanjali has provided the very essence of the philosophy and teachings of yoga in a highly scientific and systematic exposition. The Yoga Sutras of Patanjali (YSP) are one of the six darshanas of Hindu schools of philosophy and a very important milestone in the history of Yoga. The book is a set of 195 aphorisms (sutras), which are short, terse phrases designed to be easy to memorize. Though brief, the Yoga Sutras is an enormously influential work that is just as relevant for yoga philosophy and practice today as it was when it was written. The sutras are divided into four chapters (pada) as follows:

Samadhi Pada: The first chapter provides a definition and the purpose of yoga. Various approaches that can be used to achieve the objectives of yoga are provided.

Sadhana Pada: The second chapter contains the practical approach to achieve the goals of yoga. In this chapter, the author gives a description of the eight limbs of yoga called Ashtanga Yoga, which is how the yoga sutras are sometimes referred to.

Vibhuti Pada: The third chapter focuses on some of the supernatural powers that an adept yogi may be able to attain.

Kaivalya Pada: In the fourth chapter the nature of the mind and mental perceptions, desire, bondage and liberation and what follows it are discussed.

The Yoga Sutras of Patanjali are also sometimes referred to as “Raj Yoga” or the “Royal Yoga”. In sutra 2

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of the first chapter, Patanjali has defined yoga as -

योगि वृत्ति निरोधः ॥२॥ “yogaschitta vritti nirodhah” (Sanskrit)

"Yoga is the restraint of the modifications of the mind-stuff" – translation by Swami Vivekananda

In subsequent sutras, Patanjali explains that once the mind is properly restrained, then the “seer” or the “soul, the true self” can rest in its own true nature. Further, as long as the mind is not under control, it continues to assume the form of the “vrittis” or the perturbations in mind, and these vrittis become the cause of human suffering. In simpler terms, what this definition tells us is that we can be peaceful and happy when we can control the mind; else, the mind continues to control us, and we stay in a state of suffering.

2.1.2.2.1 Ashtanga Yoga (Eight Limbs of Yoga)

The eight limbs of yoga as defined in the second chapter are as follows:

Yamas (self-restraints): The yamas are guidelines for how to interact with the outside world at a social level. The five yamas are: Ahimsa (non-violence), Satya (truthfulness), Asteya (non-stealing), Brahmacharya (abstinence), Aparigraha (non-hoarding).

Niyamas (observances): The niyamas represent guidelines for self-discipline. The five niyamas are: shoucha (cleanliness), santosha (contentment), tapas (austerity), swadhyaya (the study of the scriptures and self-study), and Ishwara pranidhana (surrender to God). Together, yamas and niyamas provide an ethical and moral code to be followed so that the aspiring yogi can establish an adequate moral foundation for his/her spiritual journey.

Asana (posture): Asana refers to the seated posture which should be steady and comfortable so the yogi can sit and meditate for long periods of time.

Pranayama (breath control): Pranayama, which literally means stretching or expansion of prana, the vital life force, involves breath control and helps train and prepare the mind for dharana (concentration).

Pratyahara (sense withdrawal): Through pratyahara one gains the ability to withdraw the senses from their objects thus achieving perfect control over the senses.

Dharana (concentration/focus): Dharana involves focusing the mind on a single object of concentration for long periods of time.

Dhyana (meditation): When there is an uninterrupted flow of the mind toward the object of focus, the yogi enters the state of meditation.

Samadhi (total absorption): Finally when even the self-awareness of the mind disappears, and only the object of meditation shines through, it is called the state of samadhi. It is only in the highest stage of “Samadhi”, called the “nirbeeja Samadhi” (seedless Samadhi) when the mind is fully under control and brings the yogi to a state of perpetual peace and tranquility.

3. Yoga for Health Promotion

- Introduction and study of Patanjala Yoga Sutra including memorization of selected Sutras (P.Y.S. 1/2,14,2/1,27,29, 46,47,49)
- Introduction and study of Bhagavad Gita including memorization of selected Slokas (B.G. 2/47,48,50 3/13)

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- ☐ Concept of Aahara (Diet) according to Yogic texts
- ☐ Significance of Hath Yoga practices in Health promotion
- ☐ Concept of mental well being according to Patanjali Yoga
- ☐ Yogic practices of Patanjali Yoga: Bahiranga and Antaranga Yoga
- ☐ Concept of healthy living in Bhagwad Gita
- ☐ Importance of subjective experience in daily Yoga Practice

Unit Objectives

At the end of this unit, you will be able to:

1. Explain about human body anatomy
2. Explain various internal organs and glands
3. Define role of organs and glands in a person's health
4. Describe the benefits of Yoga on human body

3.1 Human Body

Human Body is a very complex machine. It works well when all of its components work in tandem and remain in good condition. We can divide Human Body in following systems -

- 1- Skeletal System
- 2- Cardiovascular System
- 3- Muscular System
- 4- Digestive System
- 5- Endocrine System
- 6- Nervous System
- 7- Respiratory System
- 8- Immune & Lymphatic System
- 9- Urinary System
- 10- Female Reproductive System
- 11- Male Reproductive System

3.1.1 Skeletal System

The skeletal system in an adult body is made up of 206 individual bones. These bones are arranged into two major divisions: the axial skeleton and the appendicular skeleton. The axial skeleton runs along the body's midline axis and is made up of 80 bones in the following regions:

Skull, Hyoid, Auditory ossicles, Ribs, Sternum and Vertebral column

The appendicular skeleton is made up of 126 bones in the following regions:

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Upper limbs, Lower limbs, Pelvic girdle and Pectoral (shoulder) girdle



Fig. 3.2.1. Skeletal System

3.2.1.1 Skull

The skull is composed of 22 bones that are fused together except for the mandible. These 21 fused bones are separate in children to allow the skull and brain to grow, but fuse to give added strength and protection as an adult. The mandible remains as a movable jaw bone and forms the only movable joint in the skull with the temporal bone.

The bones of the superior portion of the skull are known as the cranium and protect the brain from damage. The bones of the inferior and anterior portion of the skull are known as facial bones and support the eyes, nose, and mouth.



Fig. 3.2.2. Skull

3.1.1.2 Hyoid and Auditory Ossicles

The hyoid is a small, U-shaped bone found just inferior to the mandible. The hyoid is the only bone in the body that does not form a joint with any other bone—it is a floating bone. The hyoid's function is to help hold the trachea open and to form a bony connection for the tongue muscles.

The malleus, incus, and stapes—known collectively as the auditory ossicles—are the smallest bones in the body. Found in a small cavity inside of the temporal bone, they serve to transmit and amplify sound from the eardrum to the inner ear.



Fig. 3.2.3 Hyoid & Auditory Ossicles

3.1.1.3 Vertebrae

Twenty-six vertebrae form the vertebral column of the human body. They are named by region:

Cervical (neck) - 7 vertebrae Thoracic (chest) - 12 vertebrae Lumbar (lower back) - 5 vertebrae Sacrum - 1 vertebra Coccyx (tailbone) - 1 vertebra

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With the exception of the singular sacrum and coccyx, each vertebra is named by the first letter of its region and its position along the superior-inferior axis. For example, the most superior thoracic vertebra is called T1, and the most inferior is called T12.



Fig. 3.2.4. Vertebrae

3.1.1.4 Ribs and Sternum

The sternum, or breastbone, is a thin, knife-shaped bone located along the midline of the anterior side of the thoracic region of the skeleton. The sternum connects to the ribs by thin bands of cartilage called the costal cartilage.

There are 12 pairs of ribs that together with the sternum form the ribcage of the thoracic region. The first seven ribs are known as “true ribs” because they connect the thoracic vertebrae directly to the sternum through their own band of costal cartilage. Ribs 8, 9, and 10 all connect to the sternum through cartilage that is connected to the cartilage of the seventh rib, so we consider these to be “false ribs.” Ribs 11 and 12 are also false ribs but are also considered to be “floating ribs” because they do not have any cartilage attachment to the sternum at all.



Fig.3.2.5. Ribs & Sternum

3.1.1.5 Pectoral Girdle and Upper Limb

The pectoral girdle connects the upper limb (arm) bones to the axial skeleton and consists of the left and right clavicles and left and right scapulae.

The humerus is the bone of the upper arm. It forms the ball and socket joint of the shoulder with the scapula and forms the elbow joint with the lower arm bones. The radius and ulna are the two bones of the forearm. The ulna is on the medial side of the forearm and forms a hinge joint with the humerus at the elbow. The radius allows the forearm and hand to turn over at the wrist joint.

The lower arm bones form the wrist joint with the carpals, a group of eight small bones that give added flexibility to the wrist. The carpals are connected to the five metacarpals that form the bones of the hand and connect to each of the fingers. Each finger has three bones known as phalanges, except for the thumb, which only has two phalanges.

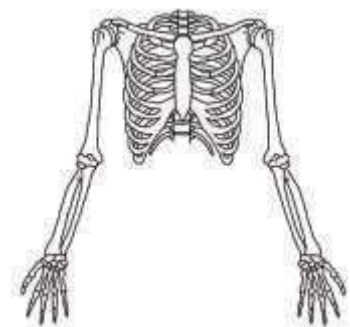


Fig. 3.2.6. Pectoral Girdle & Upper Limb

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3.1.1.6. Pelvic Girdle and Lower Limb

Formed by the left and right hip bones, the pelvic girdle connects the lower limb (leg) bones to the axial skeleton.

The femur is the largest bone in the body and the only bone of the thigh (femoral) region. The femur forms the ball and socket hip joint with the hip bone and forms the knee joint with the tibia and patella. Commonly called the kneecap, the patella is special because it is one of the few bones that are not present at birth. The patella forms in early childhood to support the knee for walking and crawling.

The tibia and fibula are the bones of the lower leg. The tibia is much larger than the fibula and bears almost all of the body's weight. The fibula is mainly a muscle attachment point and is used to help maintain balance. The tibia and fibula form the ankle joint with the talus, one of the seven tarsal bones in the foot.



Fig. 3.2.7. Pelvic Girdle & Lower Limb

The tarsals are a group of seven small bones that form the posterior end of the foot and heel. The tarsals form joints with the five long metatarsals of the foot. Then each of the metatarsals forms a joint with one of the sets of phalanges in the toes. Each toe has three phalanges except for the big toe which only has two phalanges

3.2.1.2 Cardiovascular System

The cardiovascular system consists of the heart, blood vessels, and the approximately 5 liters of blood that the blood vessels transport. Responsible for transporting oxygen, nutrients, hormones, and cellular waste products throughout the body, the cardiovascular system is powered by the body's hardest-working organ — the heart, which is only about the size of a closed fist. Even at rest, the average heart easily pumps over 5 liters of blood throughout the body every minute.

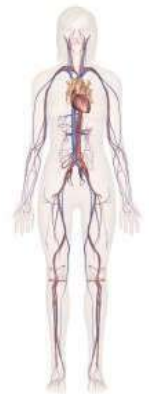


Fig. 3.2.8. Cardiovascular System

3.1.2.1 The Heart

The heart is a muscular pumping organ located medial to the lungs along the body's midline in the thoracic region. The bottom tip of the heart, known as its apex, is turned to the left so that about 2/3 of the heart is located on the body's left side with the other 1/3 on the right. The top of the heart, known as the heart's base, connects to the great blood vessels of the body: the aorta, vena cava, pulmonary trunk, and pulmonary veins.

There are 2 primary circulatory loops in the human body: the pulmonary circulation loop and the systemic circulation loop.



Fig. 3.2.9. The Heart

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Pulmonary circulation transports de-oxygenated blood from the right side of the heart to the lungs, where the blood picks up oxygen and returns to the left side of the heart. The pumping chambers of the heart that support the pulmonary circulation loop are the right atrium and right ventricle.

Systemic circulation carries highly oxygenated blood from the left side of the heart to all of the issues of the body (with the exception of the heart and lungs). Systemic circulation removes wastes from body issues and returns de-oxygenated blood to the right side of the heart. The left atrium and left ventricle of the heart are the pumping chambers for the systemic circulation loop.

3.1.2.2 Blood Vessels

Blood vessels are the body's highways that allow blood to flow quickly and efficiently from the heart to every region of the body and back again. The size of blood vessels corresponds with the amount of blood that passes through the vessel. All blood vessels contain a hollow area called the lumen through which blood is able to flow. Around the lumen is the wall of the vessel, which may be thin in the case of capillaries or very thick in the case of arteries.



Fig. 3.2.10. Blood Vessels

3.2.1.3 Muscular System

The muscular system is responsible for the movement of the human body. Attached to the bones of the skeletal system are about 700 named muscles that make up roughly half of a person's body weight. Each of these muscles is a discrete organ constructed of skeletal muscle issue, blood vessels, tendons, and nerves. Muscle issue is also found inside of the heart, digestive organs, and blood vessels. In these organs, muscles serve to move substances throughout the body.



Fig. 3.2.11. Muscular System

3.1.3.1 Visceral Muscle

Visceral muscle is found inside of organs like the stomach, intestines, and blood vessels. The weakest of all muscle issues, visceral muscle makes organs contract to move substances through the organ. Because visceral muscle is controlled by the unconscious part of the brain, it is known as involuntary muscle—it cannot be directly controlled by the conscious mind. The term “smooth muscle” is often used to describe visceral muscle because it has a very smooth, uniform appearance when viewed under a microscope. This smooth appearance starkly contrasts with the banded appearance of cardiac and skeletal muscles.

3.1.3.2 Cardiac Muscle

Found only in the heart, cardiac muscle is responsible for pumping blood throughout the body. Cardiac muscle issue cannot be controlled consciously, so it is an involuntary muscle. While hormones and signals from the brain adjust the rate of contraction, cardiac muscle simulates itself to contract. The natural pacemaker of the heart is made of cardiac muscle issue that simulates other cardiac muscle

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cells to contract. Because of its self-simulation, cardiac muscle is considered to be autorhythmic or intrinsically controlled.

The cells of cardiac muscle are striated—that is, they appear to have light and dark stripes when viewed under a light microscope. The arrangement of protein fibers inside of the cells causes these light and dark bands. Striations indicate that a muscle cell is very strong, unlike visceral muscles.

The cells of cardiac muscle are branched X or Y-shaped cells tightly connected together by special junctions called intercalated disks. Intercalated disks are made up of finger-like projections from two neighbouring cells that interlock and provide a strong bond between the cells. The branched structure and intercalated disks allow the muscle cells to resist high blood pressures and the strain of pumping blood throughout a lifetime. These features also help to spread electrochemical signals quickly from cell to cell so that the heart can beat as a unit.

3.1.3.3 Skeletal Muscle

Skeletal muscle is the only voluntary muscle in the human body—it is controlled consciously. Every physical action that a person consciously performs (e.g. speaking, walking, or writing) requires skeletal muscle. The function of skeletal muscle is to contract to move parts of the body closer to the bone that the muscle is attached to. Most skeletal muscles are attached to two bones across a joint, so the muscle serves to move parts of those bones closer to each other. Skeletal muscle cells form when many smaller progenitor cells lump themselves together to form long, straight, multinucleated fibers. Striated just like cardiac muscle, these skeletal muscle fibers are very strong. Skeletal muscle derives its name from the fact that these muscles always connect to the skeleton in at least one place.

3.1.4 Digestive System

The digestive system is a group of organs working together to convert food into energy and basic nutrients to feed the entire body. Food passes through a long tube inside the body known as the alimentary canal or the gastrointestinal tract (GI tract). The alimentary canal is made up of the oral cavity, pharynx, esophagus, stomach, small intestines, and large intestines. In addition to the alimentary canal, there are several important accessory organs that help your body to digest food. Following are the main parts of Digestive System.

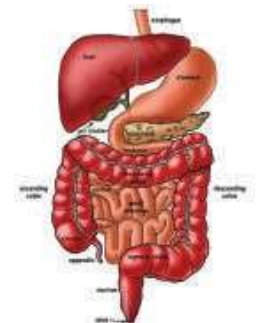


Fig. 2.2.12. Digestive System

3.1.4.1 Mouth

Food begins its journey through the digestive system in the mouth, also known as the oral cavity. Inside the mouth are many accessory organs that aid in the digestion of food—the tongue, teeth, and salivary glands. Teeth chop food into small pieces, which are moistened by saliva before the tongue and other muscles push the food into the pharynx.

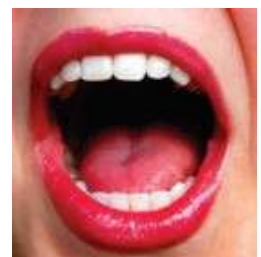


Fig. 2.2.13. Mouth

2.2.1.4.2 Teeth

The teeth are 32 small, hard organs found along the anterior and lateral edges of the mouth. Each tooth is made of a bone-like substance called dentin and covered in a layer of enamel—the hardest substance in the body. Teeth are living organs and contain blood vessels and nerves under the dentin in a soft region known as the pulp. The teeth are designed for cutting and grinding food into smaller pieces.



Fig. 2.2.14. Teeth

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3.1.4.3 Tongue

The tongue is located on the inferior portion of the mouth just posterior and medial to the teeth. It is a small organ made up of several pairs of muscles covered in a thin, bumpy, skin-like layer. The outside of the tongue contains many rough papillae for gripping food as it is moved by the tongue's muscles. The taste buds on the surface of the tongue detect taste molecules in food and connect to nerves in the tongue to send taste information to the brain. The tongue also helps to push food toward the posterior part of the mouth for swallowing.]



Fig. 3.2.15. Tongue

3.1.4.4 Salivary Glands

Surrounding the mouth are 3 sets of salivary glands. The salivary glands are accessory organs that produce a watery secretion known as saliva. Saliva helps to moisten food and begins the digestion of carbohydrates. The body also uses saliva to lubricate food as it passes through the mouth, pharynx, and esophagus.



Fig. 3.2.16. Salivary Glands

3.1.4.5 Pharynx

The pharynx, or throat, is a funnel-shaped tube connected to the posterior end of the mouth. The pharynx is responsible for the passing of masses of chewed food from the mouth to the esophagus. The pharynx also plays an important role in the respiratory system, as air from the nasal cavity passes through the pharynx on its way to the larynx and eventually the lungs. Because the pharynx serves two different functions, it contains a flap of tissue known as the epiglottis that acts as a switch to route food to the esophagus and air to the larynx.

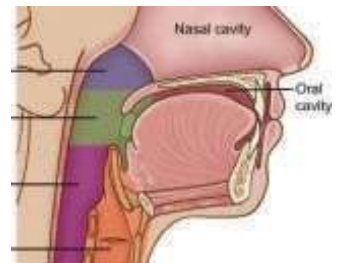


Fig. 3.2.17. Pharynx

3.1.4.6 Esophagus

The esophagus is a muscular tube connecting the pharynx to the stomach that is part of the upper gastrointestinal tract. It carries swallowed masses of chewed food along its length. At the inferior end of the esophagus is a muscular ring called the lower esophageal sphincter or cardiac sphincter.

The function of this sphincter is to close off the end of the esophagus and trap food in the stomach.



Fig. 3.2.18. Esophagus

3.1.4.7 Stomach

The stomach is a muscular sac that is located on the left side of the abdominal cavity, just inferior to the diaphragm. In an average person, the stomach is about the size of their two fists placed next to each other. This major organ acts as a storage tank for food so that the body has time to digest large meals properly. The stomach also contains hydrochloric acid and digestive enzymes that continue the digestion of food that began in the mouth.



Fig. 3.2.19. Stomach

3.1.4.8 Small Intesine

The small intestine is a long, thin tube about 1 inch in diameter and about 10 feet long that is part of the lower gastrointestinal tract. It is located just inferior to the stomach and takes up most of the space in the abdominal cavity. The entire small intestine is coiled like a hose, and the inside surface is full of many ridges and folds. These folds are used to maximize the digestion of food and absorption of nutrients. By the time food leaves the small intestine, around 90% of all nutrients have been extracted from the food that entered it.



Fig. 3.2.20. Small Intestine

3.1.4.9 Liver and Gallbladder

The liver is a roughly triangular accessory organ of the digestive system located to the right of the stomach, just inferior to the diaphragm and superior to the small intestine. The liver weighs about 3 pounds and is the second largest organ in the body. The liver has many different functions in the body, but the main function of the liver in digestion is the production of bile and its secretion into the small intestine. The gallbladder is a small, pear-shaped organ located just posterior to the liver. The gallbladder is used to store and recycle excess bile from the small intestine so that it can be reused for the digestion of food.

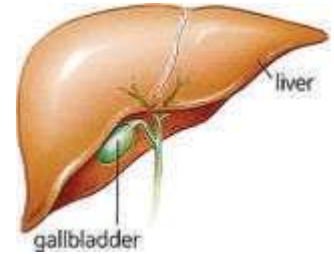


Fig. 3.2.21. Liver & Gall Bladder

3.1.4.10 Pancreas

The pancreas is a large gland located just inferior and posterior to the stomach. It is about 6 inches long and shaped like a short, lumpy snake with its "head" connected to the duodenum and its "tail" pointing to the left wall of the abdominal cavity. The pancreas secretes digestive enzymes into the small intestine to complete the chemical digestion.

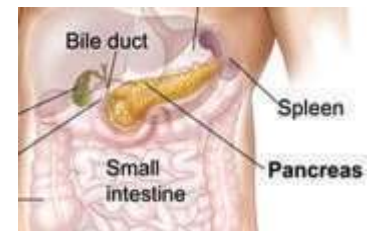


Fig. 3.2.22. Pancreas

3.1.4.11 Large Intesine

The large intestine is a long, thick tube about 2 ½ inches in diameter and about 5 feet long. It is located just inferior to the stomach and wraps around the superior and lateral border of the small intestine. The large intestine absorbs water and contains many symbiotic bacteria that aid in the breaking down of wastes to extract some small amounts of nutrients. Faeces in the large intestine exit the body through the anal canal.



Fig. 3.2.23. Small Intestine

3.2.1.5 Endocrine System

The endocrine system includes all of the glands of the body and the hormones produced by those glands. The glands are controlled directly by stimulation from the nervous system as well as by chemical receptors in the blood and hormones produced by other glands. By regulating the functions of organs in the body, these glands help to maintain the body's homeostasis, Cellular metabolism, reproduction, sexual development, sugar and mineral homeostasis, heart rate, and digestion.

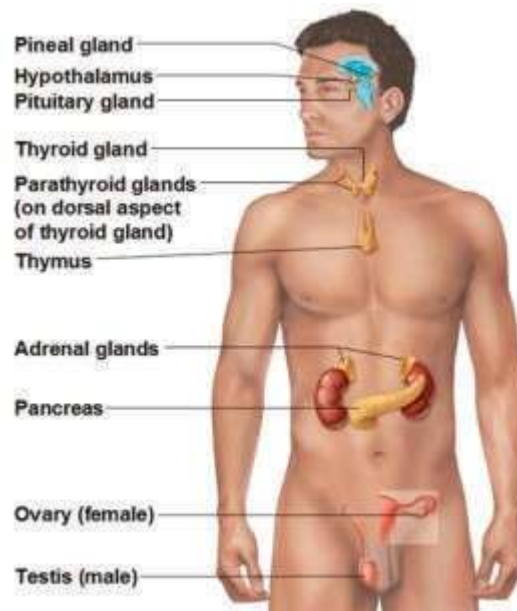


Fig. 3.2.24. Endocrine System

3.1.5 Hypothalamus

The hypothalamus is a part of the brain located superior and anterior to the brain stem and inferior to the thalamus. It serves many different functions in the nervous system and is also responsible for the direct control of the endocrine system through the pituitary gland. The hypothalamus contains special cells called neurosecretory cells—neurons that secrete hormones:

- 1- Thyrotropin-releasing hormone (TRH)
- 2- Growth hormone-releasing hormone (GHRH) 3- Growth hormone-inhibiting hormone (GHIH) 4- Gonadotropin-releasing hormone (GnRH)
- 5- Corticotropin-releasing hormone (CRH)
- 6- Oxytocin
- 7- Antidiuretic hormone (ADH)

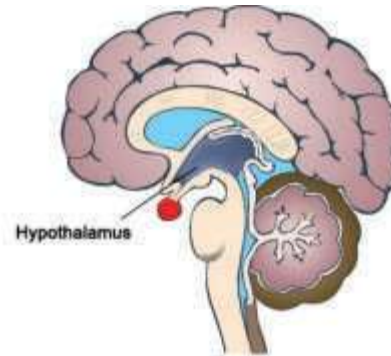


Fig. 3..2.25. Hypothalamus

3.1.5.2 Pituitary Gland

The pituitary gland, also known as the hypophysis, is a small pea-sized lump of issue connected to the inferior porion of the hypothalamus of the brain. Many blood vessels surround the pituitary gland to carry the hormones it releases throughout the body. Situated in a small depression in the sphenoid bone called the sella turcica, the pituitary gland is actually made of 2 completely separate structures: the posterior and anterior pituitary glands.

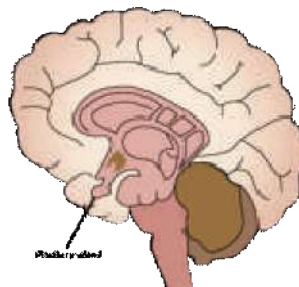
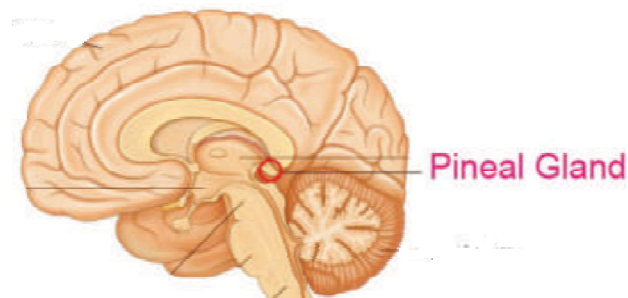


Fig. 3.2.26. Pituitary Gland

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3.1.5.3 Pineal Gland

The pineal gland is a small pinecone-shaped mass of glandular issue found just posterior to the thalamus of the brain. The pineal gland produces the hormone melatonin that helps to regulate the human sleep-wake cycle known as the circadian rhythm. The activity of the pineal gland is inhibited by simulaion from the photoreceptors of the reina. This light sensiivity causes melatonin to be produced only in low light or darkness. Increased melatonin production causes humans to feel drowsy at nighttime when the pineal gland is acive.



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3.1.5.4 Thyroid Gland

The thyroid gland is a butterfly-shaped gland located at the base of the neck and wrapped around the lateral sides of the trachea. The thyroid gland produces 3 major hormones:

Calcitonin Triiodothyronine (T3)

Thyroxine (T4)

Calcitonin is released when calcium ion levels in the blood rise above a certain set point. Calcitonin functions to reduce the concentration of ions in the blood by aiding the absorption of calcium into the matrix of bones. The hormones T3 and T4 work together to regulate the body's metabolic rate. Increased levels of T3 and T4 lead to increased cellular activity and energy usage in the body.

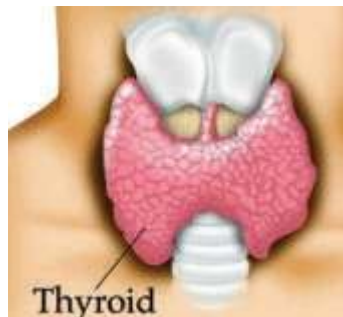


Fig. 3.2.27. Pineal Gland

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3.1.5.5 Parathyroid Glands

The parathyroid glands are 4 small masses of glandular issue found on the posterior side of the thyroid gland. The parathyroid glands produce the hormone parathyroid hormone (PTH), which is involved in calcium ion homeostasis. PTH is released from the parathyroid glands when calcium ion levels in the blood drop below a set point. PTH stimulates the osteoclasts to break down the calcium containing bone matrix to release free calcium ions into the bloodstream. PTH also triggers the kidneys to return calcium ions filtered out of the blood back to the bloodstream so that it is conserved.



Fig. 3.2.29. Parathyroid Glands

3.1.5.6 Adrenal Glands

The adrenal glands are a pair of roughly triangular glands found immediately superior to the kidneys. The adrenal glands are each made of 2 distinct layers, each with their own unique functions: the outer adrenal cortex and inner adrenal medulla.

Androgens, such as testosterone, are produced at low levels in the adrenal cortex to regulate the growth and activity of cells that are receptive to male hormones. In adult males, the amount of androgens produced by the testes is many times greater than the amount produced by the adrenal cortex, leading to the appearance of male secondary sex characteristics.

The adrenal medulla produces the hormones epinephrine and norepinephrine under stimulation by the sympathetic division of the autonomic nervous system. Both of these hormones help to increase the flow of blood to the brain and muscles to improve the “fight-or-flight” response to stress. These hormones also work to increase heart rate, breathing rate, and blood pressure while decreasing the flow of blood to and function of organs that are not involved in responding to emergencies.

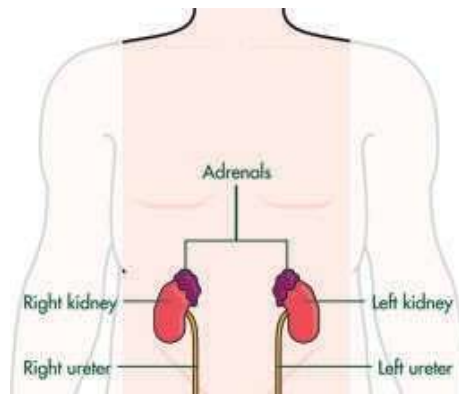


Fig. 2.2.30. Adrenal Glands

3.1.5.7 Pancreas

The pancreas is a large gland located in the abdominal cavity just inferior and posterior to the stomach. The pancreas is considered to be a heterocrine gland as it contains both endocrine and exocrine tissue. The endocrine cells of the pancreas make up just about 1% of the total mass of the pancreas and are found in small groups throughout the pancreas called islets of Langerhans. Within these islets are 2 types of cells—alpha and beta cells. The alpha cells produce the hormone glucagon, which is responsible for raising blood glucose levels. Glucagon triggers muscle and liver cells to break down the polysaccharide glycogen to release glucose into the bloodstream. The Beta cells produce the hormone insulin, which is responsible for lowering blood glucose levels after a meal. Insulin triggers the absorption of glucose from the blood into cells, where it is added to glycogen molecules for storage.



Fig. 3.2.31. Pancreas

3.1.5.8 Gonads

The gonads—ovaries in females and testes in males—are responsible for producing the sex hormones of the body. These sex hormones determine the secondary sex characteristics of

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adult females and adult males.

Testes: The testes are a pair of ellipsoid organs found in the scrotum of males that produce the androgen testosterone in males after the start of puberty. Testosterone has effects on many parts of the body, including the muscles, bones, sex organs, and hair follicles. This hormone causes growth and increases in strength of the bones and muscles, including the accelerated growth of long bones during adolescence. During puberty, testosterone controls the growth and development of the sex organs and body hair of males, including pubic, chest, and facial hair. In men who have inherited genes for baldness, testosterone triggers the onset of androgenic alopecia, commonly known as male pattern baldness.

Ovaries: The ovaries are a pair of almond-shaped glands located in the pelvic body cavity lateral and superior to the uterus in females. The ovaries produce the female sex hormones progesterone and estrogens. Progesterone is most active in females during ovulation and pregnancy where it maintains appropriate conditions in the human body to support a developing fetus. Estrogens are a group of related hormones that function as the primary female sex hormones. The release of estrogen



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during puberty triggers the development of female secondary sex characteristics such as uterine development, breast development, and the growth of pubic hair. Estrogen also triggers the increased growth of bones during adolescence that leads to adult height and proportions.

3.1.5.9 Thymus

The thymus is a soft, triangular-shaped organ found in the chest posterior to the sternum. The thymus produces hormones called thymosins that help to train and develop T-lymphocytes during fetal development and childhood. The T-lymphocytes produced in the thymus go on to protect the body from pathogens throughout a person's entire life. The thymus becomes inactive during puberty and is slowly replaced by adipose tissue throughout a person's life.

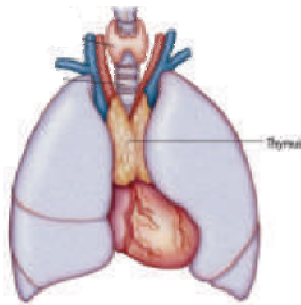


Fig. 3.2.33. Thymus

3.1.6 Nervous System

The nervous system consists of the brain, spinal cord, sensory organs, and all of the nerves that connect these organs to the rest of the body. Together, these organs are responsible for the control of the body and communication among its parts. The brain and spinal cord form the control center known as the central nervous system (CNS), where information is evaluated and decisions made. The sensory nerves and sense organs of the peripheral nervous system (PNS) monitor.

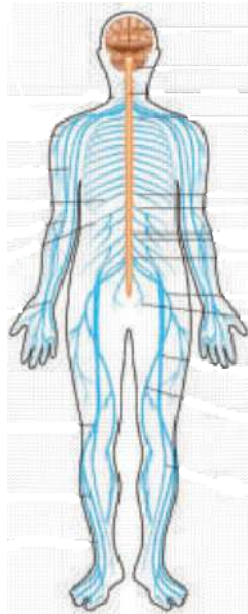


Fig. 3.2.34. Nervous System

3.2.1.7 Respiratory System

The cells of the human body require a constant stream of oxygen to stay alive. The respiratory system provides oxygen to the body's cells while removing carbon dioxide, a waste product that can be lethal if allowed to accumulate. There are 3 major parts of the respiratory system: the airway, the lungs, and the muscles of respiration. The airway, which includes the nose, mouth, pharynx, larynx, trachea, bronchi, and bronchioles, carries air between the lungs and the body's exterior.

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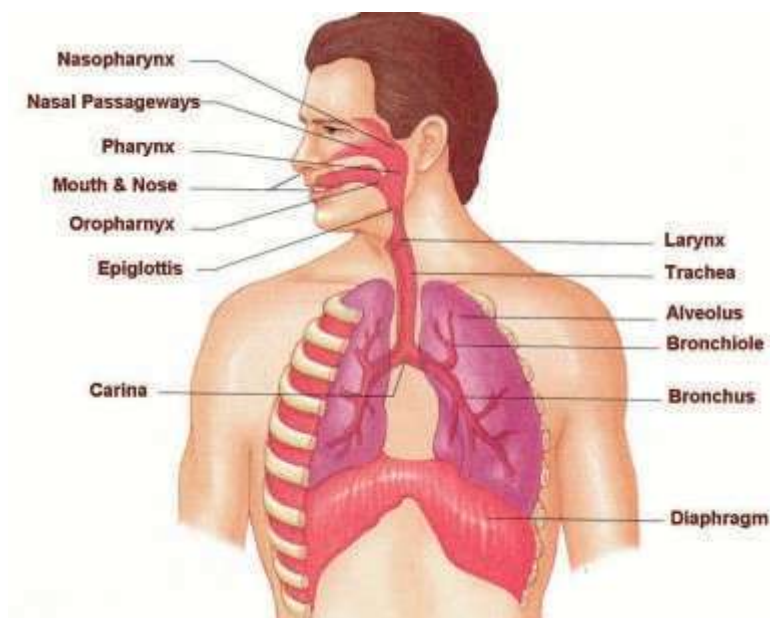


Fig. 3.2.35. Respiratory System

3.2.1.8 Immune and Lymphatic Systems

The immune and lymphatic systems are two closely related organ systems that share several organs and physiological functions. The immune system is our body's defense system against infectious pathogenic viruses, bacteria, and fungi as well as parasitic animals and protoists. The immune system works to keep these harmful agents out of the body and attacks those that manage to enter. The lymphatic system is a system of capillaries, vessels, and nodes.



Fig. 3.2.36. Immune & Lymphatic System

3.2.1.9 Urinary System

The urinary system consists of the kidneys, ureters, urinary bladder, and urethra. The kidneys filter the blood to remove wastes and produce urine. The ureters, urinary bladder, and urethra together form the urinary tract, which acts as a plumbing system to drain urine from the kidneys, store it, and then release it during urination. Besides filtering and eliminating wastes from the body, the urinary system also maintains the homeostasis of water, ions, pH, blood pressure and calcium.

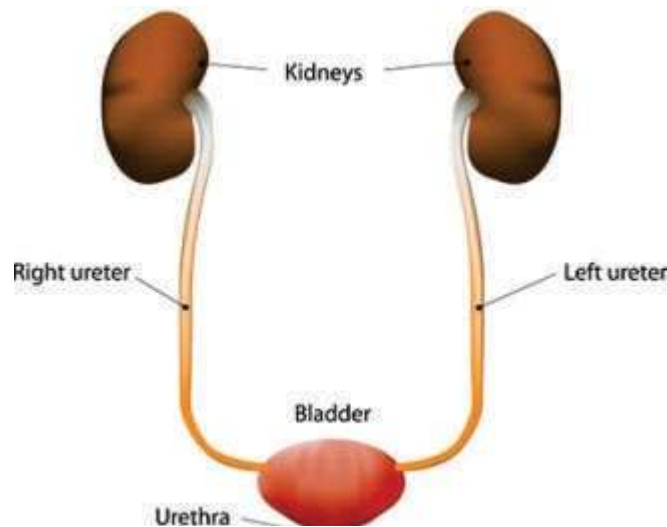


Fig. 2.2.37. Urinary System

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3.1.10 Female Reproductive System

The female reproductive system includes the ovaries, fallopian tubes, uterus, vagina, vulva, mammary glands, and breasts. These organs are involved in the production and transportation of gametes and the production of sex hormones. The female reproductive system also facilitates the fertilization of ova by sperm and supports the development of offspring during pregnancy and infancy.



Fig. 2.2.38. Female Reproductive System

3.1.11 Male Reproductive System

The Male reproductive system comprises of many organs, whose main function is to produce and supply sperms for reproduction. The male sex system is formed by testosterone secreted from the fetal testes; on reaching puberty, the secondary sex organ gets developed and become fully functional. Its main function is to produce Sperm in the testes and to send it by the epididymis, ejaculatory duct, and urethra. The sperms are released from the penis during ejaculation.



Fig. 2.2.39. Male Reproductive System

3.2.2 Benefits of Yoga on Human Body

Unlike other physical exercises, which give benefits to the body only, Yoga benefits Body, mind, and soul. Also, no other exercise give benefits to internal organs and glands, while for good health it is very essential that they all should work properly. Below are some of the benefits of yoga -

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3.2.1 Improves flexibility

Improved flexibility is one of the first and most obvious benefits of yoga. During your first class, you probably won't be able to touch your toes, never mind do a backbend. But if you stick with it, you'll notice a gradual loosening, and eventually, seemingly impossible poses will become possible. You'll also probably notice that aches and pains start to disappear. That's no coincidence. Tight hips can strain the knee joint due to improper alignment of the thigh and shinbones. Tight hamstrings can lead to a flattening of the lumbar spine, which can cause back pain. And inflexibility in muscles and connective tissues, such as fascia and ligaments, can cause poor posture.

3.2.2 Builds Muscle Strength

Strong muscles do more than look good. They also protect us from conditions like arthritis and back pain and help prevent falls in elderly people. And when you build strength through yoga, you balance it with flexibility. If you just went to the gym and lifted weights, you might build strength at the expense of flexibility.

3.2.3 Improves Body Posture

Your head is like a bowling ball—big, round, and heavy. When it's balanced directly over an erect spine, it takes much less work for your neck and back muscles to support it. Move it several inches forward, however, and you start to strain those muscles. Hold up that forward-leaning bowling ball for eight or 12 hours a day, and it's no wonder you're tired. And fatigue might not be your only problem. Poor posture can cause back, neck, and other muscle and joint problems. As you slump, your body may compensate by flattening the normal inward curves in your neck and lower back. This can cause pain and degenerative arthritis of the spine.

3.2.4 Prevents carilage and joint breakdown

Each ime you pracice yoga, you take your joints through their full range of moion. This can help prevent degeneraive arthriis or miigate disability by “squeezing and soaking” areas of carilage that normally aren't used. Joint carilage is like a sponge; it receives fresh nutrients only when its fluid is squeezed out, and a new supply can be soaked up. Without proper sustenance, neglected areas of carilage can eventually wear out, exposing the underlying bone like worn-out brake pads.

2.2.2.5 Protects Spine

Spinal disks—the shock absorbers between the vertebrae that can herniate and compress nerves—crave movement. That's the only way they get their nutrients. If you've got a well-balanced asana pracice with plenty of backbends, forward bends, and twist, you'll help keep your disks supple.

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3.2.6 Betters your bone health

It's well documented that weight-bearing exercise strengthens bones and helps ward off osteoporosis. Many postures in yoga require that you lift your own weight. And some, like Downward and Upward-facing dog, help strengthen the arm bones, which are paricularly vulnerable to osteoporotic fractures.

3.2.7 Increases your blood flow

Yoga gets your blood flowing. More specifically, the relaxaion exercises you learn in yoga can help your circulaion, especially in your hands and feet. Yoga also gets more oxygen to your cells, which funcion better as a result. Twising poses are thought to wring out venous blood from internal organs and allow oxygenated blood to flow in once the twist is released. Inverted poses, such as Headstand, Handstand, and Shoulderstand, encourage venous blood from the legs and pelvis to flow back to the heart, where it can be pumped to the lungs to be freshly oxygenated. This can help if you have swelling in your legs due to heart or kidney problems. Yoga also boosts levels of hemoglobin and red blood cells, which carry oxygen to the issues. And it thins the blood by making platelets less sickly and by cutting the level of clot-promoing proteins in the blood. This can lead to a decrease in heart attacks and strokes since blood clots are often the main cause behind them.

3.2.8 Drains your lymphs and boosts immunity

When you contract and stretch muscles, move organs around, and come in and out of yoga postures, you increase the drainage of lymph (a viscous fluid rich in immune cells). This helps the lymphatic system fight infecion, destroy cancerous cells, and dispose of the toxic waste products of cellular functioning.

3.2.9 Ups your heart rate

When you regularly get your heart rate into the aerobic range, you lower your risk of heart attack and can relieve depression. While not all yoga is aerobic, if you do it vigorously or Ashtanga classes, it can boost your heart rate into the aerobic range. But even yoga pracices that don't get your heart rate up that high can improve cardiovascular condiioning. Studies have found that yoga pracice lowers the resing heart rate, increases endurance, and can improve your maximum uptake of oxygen during exercise—all reflecons of improved aerobic condiioning. One study found that subjects who were taught only pranayama could do more exercise with less oxygen.

3.2.10 Drops your blood pressure

If you've got high blood pressure, you will get benefited from yoga. When compared the effects of Shavasana (Corpse Pose) with simply lying on a couch, after three months, Savasana was associated with a 26-point drop in systolic blood pressure (the top number) and a 15-point drop in diastolic blood pressure (the bottom number)—and the higher the initial blood pressure, the bigger the drop.

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3.2.11 Regulates your adrenal glands

Yoga lowers cortisol levels. If that doesn't sound like much, consider this. Normally, the adrenal glands secrete cortisol in response to an acute crisis, which temporarily boosts immune function. If your cortisol levels stay high even after the crisis, they can compromise the immune system. Temporary boosts of cortisol help with long-term memory, but chronically high levels undermine memory and may lead to permanent changes in the brain. Additionally, excessive cortisol has been linked with major depression, osteoporosis (it extracts calcium and other minerals from bones and interferes with the laying down of new bone), high blood pressure, and insulin resistance. In rats, high cortisol levels lead to what researchers call “food-seeking behavior” (the kind that drives you to eat when you're upset, angry, or stressed). The body takes those extra calories and distributes them as fat in the abdomen, contributing to weight gain and the risk of diabetes and heart attack.

3.2.12 Makes you happier

Feeling sad? Sit in Lotus. Better yet, rise up into a backbend or soar royally into King Dancer Pose. While it's not as simple as that, one study found that a consistent yoga practice improved depression and led to a significant increase in serotonin levels and a decrease in the levels of monoamine oxidase.

3.2.13 Creates a healthy lifestyle

Move more, eat less—that's the adage of many a dieter. Yoga can help on both fronts. A regular practice gets you moving, and burns calories and the spiritual and emotional dimensions of your practice may encourage you to address any eating and weight related disorders on a deeper level. Yoga may also inspire you to become a more conscious eater.

3.2.14 Lowers blood sugar

Yoga lowers blood sugar and LDL (“bad”) cholesterol and boosts HDL (“good”) cholesterol. In people with diabetes, yoga has been found to lower blood sugar in several ways: by lowering cortisol and adrenaline levels, encouraging weight loss, and improving sensitivity to the effects of insulin. Get your blood sugar levels down, and you decrease your risk of diabetic complications such as heart attack, kidney failure, and blindness.

3.2.15 Helps you focus

An important component of yoga is focusing on the present. Studies have found that regular yoga practice improves coordination, reaction time, memory, and even IQ scores. People who practice Transcendental Meditation demonstrate the ability to solve problems and acquire and recall information better—probably because they're less distracted by their thoughts, which can play over and over like an endless tape loop.

2.2.16 Relaxes your system

Yoga encourages you to relax, slow your breath, and focus on the present, shifting the balance from the sympathetic nervous system (or the fight-or-flight response) to the parasympathetic nervous system. The latter is calming and restorative; it lowers breathing and heart rates, decreases blood pressure, and increases blood flow to the intestines and reproductive organs.

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3.2.17 Improves your balance

Regularly practicing yoga increases proprioception (the ability to feel what your body is doing and where it is in space) and improves balance. People with bad posture or dysfunctional movement patterns usually have poor proprioception, which has been linked to knee problems and back pain. Better balance could mean fewer falls. For the elderly, this translates into more independence and delayed admission to a nursing home or never entering one at all. For the rest of us, postures like Tree Pose can make us feel less wobbly on and off the mat.

3.2.18 Regulates your nervous system

Some advanced yogis can control their bodies in extraordinary ways, many of which are mediated by the nervous system. Scientists have monitored yogis who could induce unusual heart rhythms, generate specific brain-wave patterns, and, using a meditation technique, raise the temperature of their hands by 15 degrees Fahrenheit. If they can use yoga to do that, perhaps you could learn to improve blood flow to your pelvis if you're trying to get pregnant or induce relaxation when you're having trouble falling asleep.

3.2.19 Releases Tension From Your Limbs

Do you ever notice yourself holding the telephone or a steering wheel with a death grip or scrunching your face when staring at a computer screen? These unconscious habits can lead to chronic tension, muscle fatigue, and soreness in the wrists, arms, shoulders, neck, and face, which can increase stress and worsen your mood. As you practice yoga, you begin to notice where you hold tension: It might be in your tongue, your eyes, or the muscles of your face and neck. If you simply tune in, you may be able to release some tension in the tongue and eyes. With bigger muscles like the quadriceps, trapezius, and buttocks, it may take years of practice to learn how to relax them.

3.2.20 Helps you sleep deeper

Simulation is good, but too much of it taxes the nervous system. Yoga can provide relief from the hustle and bustle of modern life. Restorative asana, yoga nidra (a form of guided relaxation), Savasana, pranayama, and meditation encourage pratyahara, a turning inward of the senses, which provides downtime for the nervous system. Another by-product of a regular yoga practice, studies suggest, is better sleep—which means you'll be less irked and stressed and less likely to have accidents.

3.2.21 Boosts your immune system functionality

Asana and pranayama probably improve immune function, but, so far, meditation has the strongest scientific support in this area. It appears to have a beneficial effect on the functioning of the immune system, boosting it when needed (for example, raising antibody levels in response to a vaccine) and lowering it when needed (for instance, mitigating an inappropriately aggressive immune function in an autoimmune disease like psoriasis).

3.2.22 Gives your lungs room to breathe

Yogis tend to take fewer breaths of greater volume, which is both calming and more efficient. A 1998 study published in *The Lancet* taught a yogic technique known as “complete breathing” to people with lung problems due to congestive heart failure. After one month, their average respiratory rate decreased from 13.4 breaths per minute to 7.6. Meanwhile, their exercise capacity increased significantly, as did the oxygen saturation of their blood. In addition, yoga has been shown to improve various measures of lung function, including the maximum volume of the breath and the efficiency of the exhalation.

Yoga also promotes breathing through the nose, which filters the air, warms it (cold, dry air is more likely to trigger an asthma attack in people who are sensitive), and humidifies it, removing pollen and dirt and other things you'd rather not take into your lungs.

3.2.23 Prevents IBS and other digestive problems

Ulcers, irritable bowel syndrome, constipation—all of these can be exacerbated by stress. So if you stress less, you'll suffer less. Yoga, like any physical exercise, can ease constipation—and theoretically, lower the risk of colon cancer—because moving the body facilitates more rapid transport of food and waste products through the bowels. And, although it has not been studied scientifically, yogis suspect that twisting poses may be beneficial in getting waste to move through the system.

3.2.24 Gives you peace of mind

Yoga quells the fluctuations of the mind, according to 'Patanjali's Yoga Sutra. In other words, it slows down the mental loops of frustration, regret, anger, fear, and desire that can cause stress. And since stress is implicated in so many health problems—from migraines and insomnia to lupus, MS, eczema, high blood pressure, and heart attacks—if you learn to quiet your mind, you'll be likely to live longer and healthier.

3.2.25 Increases your self-esteem

Many of us suffer from chronic low self-esteem. If you handle this negatively by taking drugs, overeating, working too hard, sleeping around—you may pay the price in poorer health physically, mentally, and spiritually. If you take a positive approach and practice yoga, you'll sense, initially in brief glimpses and later in more sustained views, that you're worthwhile or, as yogic philosophy teaches, that you are a manifestation of the Divine. If you practice regularly with the intention of self-examination and betterment—not just as a substitute for an aerobics class—you can access a different side of yourself. You'll experience feelings of gratitude, empathy, and forgiveness, as well as a sense that you're part of something bigger. While better health is not the goal of spirituality, it's often a by-product, as documented by repeated scientific studies.

3.2.26 Eases your pain

Yoga can ease your pain. According to several studies, asana, meditation, or a combination of the two, reduced pain in people with arthritis, back pain, fibromyalgia, carpal tunnel syndrome, and other chronic conditions. When you relieve your pain, your mood improves, you're more inclined to be active, and you don't need as much medication.

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3.2.27 Gives you inner strength

Yoga can help you make changes in your life. In fact, that might be its greatest strength. Tapas, the Sanskrit word for “heat,” is the fire, the discipline that fuels yoga practice and that regular practice builds. The tapas you develop can be extended to the rest of your life to overcome inertia and change dysfunctional habits. You may find that without making a particular effort to change things, you start to eat better, exercise more, or finally quit smoking after years of failed attempts.

3.2.28 Connects you with guidance

Good yoga teachers can do wonders for your health. Exceptional ones do more than just guiding you through the postures. They can adjust your posture, gauge when you should go deeper in poses or back off, deliver hard truths with compassion, help you relax, and enhance and personalize your practice. A respectful relationship with a teacher goes a long way towards promoting your health.

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3.2.29 Helps keeping you drug free

If your medicine cabinet looks like a pharmacy, maybe it's time to try yoga. Studies of people with asthma, high blood pressure, Type II diabetes (formerly called adult-onset diabetes), and obsessive-compulsive disorder have shown that yoga helped them lower their dosage of medications and sometimes get off them entirely. The benefits of taking fewer drugs? You'll spend less money, and you're less likely to suffer side effects and risk dangerous drug interactions.

3.2.30 Builds awareness for transformation

Yoga and meditation build awareness. And the more aware you are, the easier it is to break free of destructive emotions like anger. Studies suggest that chronic anger and hostility are as strongly linked to heart attacks as are smoking, diabetes, and elevated cholesterol. Yoga appears to reduce anger by increasing the feelings of compassion and interconnection and by calming the nervous system and mind. It also increases your ability to step back from the drama of your own life, to remain steady in the face of bad news or unsettling events. You can still react quickly when you need to—and there's evidence that yoga speeds reaction time—but you can take that split second to choose a more thoughtful approach, reducing suffering for yourself and others.

3.2.31 Benefits your relationships

Love may not conquer all, but it certainly can aid in healing. Cultivating the emotional support of friends, family, and community has been demonstrated repeatedly to improve health and healing. A regular yoga practice helps develop friendliness, compassion, and greater equanimity. Along with yogic philosophy's emphasis on avoiding harm to others, telling the truth, and taking only what you need, this may improve many of your relationships.

3.2.32 Uses sounds to soothe your sinuses

The basics of yoga—asana, pranayama, and meditation—all work to improve your health, but there's more in the yoga toolbox. Consider chanting. It tends to prolong exhalation, which shifts the balance toward the parasympathetic nervous system. When done in a group, chanting can be a particularly powerful physical and emotional experience.

Yoga Instructor

3.2.33 Guides your body's healing in your mind's eye

If you contemplate an image in your mind's eye, as you do in yoga nidra and other practices, you can effect change in your body. Several studies have found that guided imagery reduced postoperative pain, decreased the frequency of headaches, and improved the quality of life for people with cancer and HIV.

3.2.34 Keeps allergies and viruses at bay

Kriyas, or cleansing practices, are another element of yoga. They include everything from rapid breathing exercises to elaborate internal cleansings of the intestines. Jala neti, which entails a gentle lavage of the nasal passages with salt water, removes pollen and viruses from the nose, keeps mucus from building up, and helps drain the sinuses.

3.2.35 Helps you serve others

Karma Yoga (service to others) is integral to yogic philosophy. And while you may not be inclined to serve others, your health might improve if you do. A study at the University of Michigan found that older people who volunteered a little less than an hour per week were three times as likely to be alive seven years later. Serving others can give meaning to your life, and your problems may not seem so daunting when you see what other people are dealing with.

3.2.36 Encourages self-care

In much of conventional medicine, most patients are passive recipients of care. In yoga, it's what you do for yourself that matters. Yoga gives you the tools to help you change, and you might start to feel better the first time you try practicing. You may also notice that the more you commit to practice, the more you benefit. This results in three things: You get involved in your own care, you discover that your involvement gives you the power to effect change, and seeing that you can effect change gives you hope. And hope itself can be healing.

3.2.37 Supports your connective tissue

As you read all the ways yoga improves your health, you probably noticed a lot of overlap. That's because they're intensely interwoven. Change your posture, and change the way you breathe. Change your breathing, and you change your nervous system. This is one of the great lessons of yoga: Everything is connected—your hipbone to your anklebone, you to your community, your community to the world. This interconnection is vital for understanding yoga. This holistic system simultaneously taps into many mechanisms that have additive and even multiplicative effects. This synergy may be the most important way of all that yoga heals.

3.2.38 Uses The Placebo Effect, To Affect Change

Just believing that you will get better can make you better. Unfortunately, many conventional scientists believe that if something works by eliciting the placebo effect, it doesn't count. But most of the patients who just chanted a mantra, like you might do at the beginning or end of a yoga class or throughout a meditation, they felt better.

UNIT 3.3: Food Habits & other Instrucions as per Yoga Philosophy

Unit Objectives

At the end of this unit, you will be able to:

- 3.2.1.1.3.1** Explain Yogic diet
- 3.2.1.1.3.2** Differentiate between Satvic food, Rajasic food, and Tamasic food
- 3.2.1.1.3.3** Define effect of food on human body
- 3.2.1.1.3.4** Describe benefits of Fasting
- 3.2.1.1.3.5** Describe Do's and Don'ts of Yoga

3.3.1 What is Yogic Diet?

The Yogic view on diet begins with the metaphysical or energetic concept known as “the three gunas.” As per Yogic concept, by looking at the world of matter, there are three basic types of energy – rajas, tamas, and sattva – which can be seen in all objects, experiences, and even thoughts.

Rajas is fiery energy or agitation, which in its most negative form manifests as anger. Tamas is inertia, and in its most negative form manifests as laziness. Sattva, finally, is lightness, peacefulness, and harmony.

Again, as per Yoga all three can be seen in every aspect of the material world, including our bodies, our thoughts, and our feelings, and food, of course is no exception. Some foods, such as meat, spicy foods, and caffeine, are seen to be stimulating or rajasic. Others, such as fatty, fermented, and overcooked foods, are seen as sedating or tamasic. And some, such as raw or lightly-cooked fruits and vegetables, grains, and legumes, are seen as healthy, nourishing or sattvic.

Any person practicing Yoga should consume Sattvic food for getting quick and better result from Yoga.

3.3.1.1 Sattvic Foods

Following are included in Sattvic foods –

Raw fruits

Vegetables

Lightly cooked vegetables, legumes & whole grains Raw milk



2.3.1.1 Rajasic Foods

Following are included in Rajasic foods - Meat

Spices Garlic

Refined sugar

Simulants (coffee, tea, etc.)



Fig. 2.3.3. Tamasic Food

3.3.1.3 Tamasic Foods

Following are included in Tamasic foods - Fermented foods

Fried foods Onions

Fish Eggs

Reheated foods Alcohol

Frozen Foods Fatty Foods



Fig. 2.3.3. Tamasic Food

3.3.2 Importance of Good Eating Habits in Yoga

In Yoga, not only food selection is important but its preparation is also important. Further, the way we eat and our mind set while eating are equally significant in good eating habits – that is, even the most healthful food can have a negative impact if consumed in a state of agitation or depression. This latter point is especially important – normally we pay great attention to our diet but are far less aware of our mental state when we eat. As per Yoga belief, eating calmly, mindfully, and in silence greatly enhanced the quality of nutrition as well as the mental state fostered by that meal.

Another important aspect of the gunas is that we often make the mistake of thinking that by combining rajas and tamas amounts to the same as sattva – that is, we tell ourselves if we combine stimulating activities with sedating ones, we will somehow generate “balance” – and nowhere is this more common than diet, where for example we consume spicy foods which stimulate us with fatty foods or alcohol to “calm us back down”. This mistake has several powerful negative consequences. To begin, since rajasic and tamasic foods are less-than-ideal fuel sources, we get very little energy from them. Further, because the two are sending conflicting messages to body and mind, the inner effect is profoundly taxing and draining. To get an idea of this, imagine having two bosses, one who is always praising you and one who is always criticizing – the end result might seem to balance, but the internal turmoil would be great, and our bodies and nervous systems are exactly the same. By contrast, when we eat sattvic foods we not only provide much better nourishment but also help our mind remains calmer and clear, which in turn helps us make better choices in all areas of life, including diet.

There are other nuances to Yogic diet, but one last element that deserves emphasis is how food influence our world-view. As you may have noticed, sattvic foods are generally simple and readily available, while rajasic and tamasic foods require greater effort both to obtain and prepare. The Yogis realized when our food is easy to obtain, can be enjoyed with little adornment, and leaves us feeling good physically and mentally; we tend to feel nourished by and connected to our world. On the other hand, if the struggle to obtain and expense to make pleasurable, we tend to feel “at odds” with nature – that life is hard, and the world is something that we must “conquer” in order to survive, let alone enjoy. In other words, the more we choose sattvic foods, the more we support not just our physical and emotional health but also our sense of connection with the world, in turn fostering our desire to support and care for it.

3.3.4 Importance of Fasting in Yoga

The Yogis believe fasting can be a useful tool for all of us and even in the simplest and “mildest” form can have profound benefits. Again, given the amount of time we invest in food, they realized if every now and then we take a break from eating and invest that time in our growth – for example, time with family, serving our community, or simply reflecting on our lives – these brief periods can have great impact on our personal development.

Again, it's worth noting this doesn't have to be long – even just a day or a portion of a day can be powerful. And if even that feels daunting, we can practice a “relative fast” – choosing a form of eating that's simpler but still comfortable for us, like a day of just fruits and vegetables or just juice and broth, so we free up our time while still honoring our “comfort zone.” Even at the ashram where I lived, on our weekly “fasting day” the kitchen was still open with juice, soup, and simple dishes being available throughout the day for those who felt it was a better fit for them at the moment. We can also apply the idea to other areas of our lives where we realize we invest more time than might be ideal, such as television, the news, or social media. Think of what you could accomplish if, once a week or month, you took a break from an activity that consumes a lot of your time and invests it in a “greater purpose,” however you might define that. This is the idea behind spiritual fasting and fasting on holy days in general – in both the cases, we're choosing to briefly put aside certain worldly things, not giving them up, of course, but simply taking a break to invest that energy in something more important to us that is often pressed out by daily routine.

3.3.5 Steps for Putting Spiritual Nutrition Into Practice

So those are the basics of Yogic diet and fasting. As you can see, the fundamentals are actually quite simple: the Yogis realized that by focusing on natural foods in their natural state, we could foster greater health and peace of mind, and by eating mindfully and in moderation we can further support that process. Ultimately, eating this way not only can give us the best health possible but also the best mental focus and outlook for living our spiritual values.

To offer a closing reinforcement, below are five simple steps we can use each time we eat to take even greater advantage of the powerful link between food and our ideals:

1. Consider your greater goals¹¹ – Of course, every meal is a wonderful and important chance to experience pleasure – something the Yogis felt shouldn't be denied or missed out on in any way – but it's also a chance to foster health and build our capacity to serve others. Before each meal, take a moment to look at how you'd like this meal to support your long-term goals while still provide pleasure and joy.
2. Think of connection¹¹ – As you prepare your food or wait to receive it, use the time to think of the connection between you and the world that meal represents. Think of the people who grew or prepared it, the plants or animals nourishing you, the people with whom you are sharing, and of course all those who support your work, making the meal possible.
3. Express gratitude¹¹ – Before eating, take a moment to express, silently or out-loud, your appreciation of the nourishment and pleasure you are about to receive. Even a moment of silent thanks can greatly enhance our mindfulness and enjoyment, in turn dramatically enhancing the physical and psychological nourishment we receive from each meal.

[Type text]

4. Actively enjoy¹¹ – We all know what it's like to finish a meal with little recollection of how it actually tasted. As you eat, take as much time as you can to truly savor it. Ideally, consider eating in silence, or at least try to allow at least a few moments of calm within the meal, really observing and appreciating the smells, tastes, textures, and social connections of your meal.

5. Observe & reflect¹¹ – At the end, take at least a moment simply to reflect: how does the meal feel for you? In retrospect, how were the choices you made? Are there things you'd like to be more aware of or do differently next time? This process of observing and reflecting will help reinforce good choices and allow us to be even more mindful and aware of our next meal.

- One should practice yoga calmly without any haste or exhaustion. If one is tired, he or she should rest for a while in a comfortable posture.
- One should try to practice yoga everyday regularly, preferably at the same time.
- While practicing yoga, one should concentrate on yoga alone and try to keep away the other thoughts.
- During the practice of Yoga asanas, the dirt in the internal organs of the body is directed towards the urinary bladder, So soon after completing yoga, one should pass out the urine.
- During yoga practice, if anyone feels to attend nature's call, he must go and attend to it immediately. One should not hold it back forcefully for a long time. One should also not try to suppress sneezing, cough, etc. If one feels thirsty one can drink a little water as well.
- If one sweats during yoga practice, he or she should slowly wipe it out either with a cloth or with the palms. It is better if it dries up automatically in the air.
- Pranayama should follow the asanas and meditation should follow Pranayama.
- Always lay on your back for 2 to 5 minutes with relaxed breathing, after finishing Yoga postures.
- Movements should be slow in every case. Sudden movements should be avoided.

Yoga Instructor

3.3.9 Prayer During Yoga

There are some prayers which one can offer during practicing Yoga.

1. OM saha navavatu saha nau bhunaktu
saha viryam karavavahai tejasvi navadhitam astu ma vidvishavahai
OM shani, shani, shani

May we be protected together. May we be nourished together.

May we create strength among one another. May our study be filled with brilliance and light. May there be no hostility between us.

Om peace, peace, peace.

2. Gayatri Mantra

Om bhur bhuvah svaha Tat
savitur varenyam Bargo devasya
dhimahi Dhiyo yona prachodayat

I reflect on the unity of Divine Spirit, which pervades everything in the earth, the atmosphere, and heavens.

May this Supreme Consciousness protect me and illuminate my intellect that I may realize my inherent Oneness with That.

I meditate on the great luminous light that enlightens all three worlds.

May it enlighten all.

1. **Dincharya & Ritucharya with respect to yoga lifestyle**
2. **Hathya Pradiopika**
3. **Prasthanas travel**

Practical – Demonstration & Practice skill

Unit Objectives

At the end of this unit, you will be able to:

1. Describe the clothing to wear during Yoga
2. Demonstrate how to get ready for Yoga
3. Demonstrate the key 'Yoga Kriyas'
4. Demonstrate the key Yoga exercises
5. Describe the benefits and the precautions of each Yoga
6. Describe situation when Yoga practice should be avoided

4.1 Clothing to Wear During Yoga

One should wear comfortable clothes (preferably cotton clothes), during Yoga Exercises. The clothes should be loose enough which allow you to do all the stretching exercises and Yoga poses. Since one does Yoga exercises in the group in Yoga Center, so the Yoga clothing should be such that it should not show off private body parts during practicing different Yoga poses, specially shirshasana or similar upside down poses.



Fig. 2.4.1. Ideal Clothing for Yoga

4.2 Getting Ready for Yoga

One should not straight way start doing yoga after coming to class. To get proper result from Yoga, you should do following preparatory exercises -

- 1- Breathing Practices
- 2- Body Loosening Exercises
- 3- Sithili Vyayam

4.3 Breathing Practices

- 3 Following are the breathing practices 1-

[Type text]

Hand in and out

2- Hand Stretch Breathing 3-

Ankle Stretch Breathing 4-

Rabbit Stretch Breathing 5-

Tiger Breathing

6- Dog Breathing

4.3.1 Steps for Hand in and out



Step-1: Stand Straight



Step-2: Stretch out your arms in front of you, in level with your shoulders and bring the palms together



Step-3: While breathing in, spread your arms sideways in the horizontal plane



Step-4: While breathing out, bring the arms forward with palms touching each other. Repeat the procedure five times synchronizing breathing with arms movements



Relax: Relax in standing position, hands by the side of the thighs

Tip



Feel the changes in the breath and the body, especially the arms, shoulders and the back of the neck.

4.3.2 Steps for Hand Stretch Breathing

Starting Posiion

- 1- Stand erect with feet together (heels together and toes 4 to 6 inches apart) hands relaxed by the side of the body.
- 2- Gently bring your hands in front of the chest. Interlock the fingers and place the palms on the chest.
- 3- Relax your shoulders. 4- Close your eyes.

Stage-1 (At 90°)



Step-1: Starting Posiion



Step-2: While breathing in, stretch the arms in front of your body keeping your fingers interlocked. Ensure that the arms are at shoulder level. Twist the hands so that the palms face outwards. Fully stretch the arms, but do not strain.



Step-3: Now, while exhaling reverse the process and bring the palms back on to the chest

Relax: Relax your shoulders again

Instrucions: This is one round. Repeat five imes



[Type text]

Stage-2 (At 135°)



Step-1: Repeat the same movements now stretching the arms above the forehead at an angle of 135°

Instrucions: Repeat five imes

Stage-3 (At 180°)



Step-1: Repeat the same movements, this ime stretching the arms verically above the head

Instrucions: Repeat five imes



Step-2: While moving up and down the palms may gently touch the nose ip

Tip

- 1- Relax the shoulders at the beginning and end of each cycle.
- 2- Maintain perfect awareness of the breathing.
- 3- Exhalaion (breathing out) should be longer than the inhalaion (breathing in).
- 4- If required, it can be pracised sitting on a chair too.
- 5- Properly synchronize the breathing with hand movements.

2.4.3.3 Steps for Ankle Stretch Breathing

Staring Posiion

- 1- Stand erect with feet together in Tadasana Posiion with feet close together, knees together.
- 2- Hands along the thighs with fingers stretched out.
- 3- The legs, trunk and the head aligned in a straight line.



Step-1: Open the eyes and fix your gaze on a point on the wall ahead. Place the palms in front of your thighs



Step-2: While inhaling, raise your hands and stretch the ankles. Feel yourself growing taller and firm



Step-3: As you exhale, bring your hands and heels down and Repeat five times keeping the movements of hands and ankles, continuously breathing in synchronizaion.



Step-4: Feel the stretch, from your ankles to your fingers as you reach upwards.

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Relax: Relax in standing posiion, hands by the side of the thighs. Observe your breath and enjoy the stability for a few seconds

4.3.4 Steps for Rabbit Breathing

Starting Posiion

- 1- Sit back on the heels, keeping them apart and well tucked in under the buttocks (as in Vajrasana)
- 2- Keep the head, shoulders, and buttocks in a straight line.
- 3- Place your palms on the respective thighs and Breathe normally.
- 4- keeping the knees together, bend forward and rest the forearms on the floor, with the elbows by the side of the knees and palms flat on the ground (Rabbit Pose).
- 5- Maintain the head at a distance of one hand length from the ground to the chin. Open your mouth parially and protrude the tongue with its ip just touching the lower lip.
- 6- Gaze at a point about two feet on the ground in front of you and start the pracice.



Procedure: Pant quickly like a rabbit, using only the upper part of the chest. Feel the air going in and out of the lungs. Feel the expansion and contraction of the chest muscles. Coninue for 20-40 breaths.



Relax: To finish, close your mouth and relax in Shashank asana Stretch your hands forward with the forehead resing on the ground. Feel the relaxaion of chest and thorax. Allow your breath to return to normal.

Tip

- 1- Breathe rapidly through the mouth only, using the chest (thoracic) muscles.
- 2- Make sure that the abdomen presses on your thighs, prevening any abdominal movement.
- 3- Do not drop your head on to the floor.

4.3.5 Steps for Tiger Breathing



Starting Position

- 1- Sit in Vajrasana.
- 2- Kneel on knees, and place the palms on the floor in front of you.
- 3- Keep the spine, neck and head erect.
- 4- Close the eyes.



Step-1: While inhaling lift your head up, gaze at the ceiling, arch your spine down, making it concave



Step-3: Hold this position for a while, feeling the expansion of the chest, shoulders and stretch of the belly. Keep the eyes open



Step-2: While exhaling bring your head down, chin touching the chest, arching your back upwards, and making it convex.



Relax: To finish, relax in Shashankasana, bring your knees and toes together and sit on the heels. Relax by stretching out your arms flat on the ground, fingers stretched outwards. try to place the forehead on the ground if possible feel the breath getting shallow due to the compression of the abdominal muscles

4.3.5.1 Precautions

1. Before starting the practice ensure that you are comfortable while standing on two hands and two knees.
2. Properly synchronize the breathing with movements.
3. Do not bend the elbows. Make sure that the thighs do not move forward and backward.

4.3.6 Steps for Dog Breathing



Starting Posiion

- 1- Sit back on the heels, keeping them apart and well tucked in under the buttocks (As in Vajrasana)
- 2- Keep the head, shoulders and buttocks in a straight line.
- 3- Place your palms on the respecive thighs and Breathe normally.
- 4- Now, place your hands before your knees, palms resing on the ground with fingers facing forward.
- 5- Keep the arms straight.

- 6- Lower the spine to a concave arch so that the line of your vision is parallel to the ground.
- 7- Open the mouth wide and stretch out your tongue as much as is possible and close your eyes.



Procedure: Start breathing rapidly through the mouth by flapping the abdomen forcefully. The belly (abdomen) is drawn in while breathing out and bulge it out while breathing in making a paning sound, like a dog after a run. Keep the face and neck muscles relaxed. Feel the movement of the belly and the sensaion of the air going in of your lungs. Feel the ingling sensaion in your throat and neck.



Relax: Relax in shashankasana with your forehead and elbows on the ground, arms stretched outwards. Observe the sensaions in the throat and the abdomen

Instruicions: Pracise for at least nine imes iniially. Over the next few days (about a week) you may increase it gradually. But it should not be beyond your capacity.

Tip



- 1- Feel the free smooth flow of air, in and out through the throat and the air passages.
- 2- Breathe uniformly and as rapidly as possible.

4.4.4 Types Sithili Vyayam

Following are the Types of Sithili Vyayam -

- 1- Toe Bending
- 2- Ankle Bending
- 3- Ankle Rotaion
- 4- Knee Bending
- 5- Knee Rotaion
- 6- Knee Cap Tightening
- 7- Half Butterfly
- 8- Full Butterfly
- 9- Waist Rotaion
- 10- Wrist Rotaion
- 11- Shoulder Rotaion
- 12- Neck Bending
- 13- Neck Rotaion
- 14- Elbow Stretching

4.4.1 Steps for Toe Bending



Step-1: Set yourself in the primary posiiion. Set apart the legs maintaining some distance. Concentrate on toes.



Step-3: Exhale when moving the toes forward. Be conscious about the toe's movement.



Step-2: Inhale deeply and move the toes backward with ease. Keep your eyes close while pracising.



Step-4: Don't move your ankle. Iniially repeat this exercise for 10 imes. Open your eyes after the pracice.

4.4.2 Steps for Ankle bending



Step-1: Get into the base position
Set apart the legs maintaining



Step-2: Inhale deeply while moving the



Step-3: Exhale when moving the feet



Step-4: Stretch your toes outward. Close your eyes during the exercise.

Instructions: Repeat this exercise for ten

4.4.3 Steps for Ankle Rotation



Step-1: Get yourself in the primary position. Set the legs little apart



Step-2: Rotate your feet clockwise and anti-clockwise, with the heels



Step-3: Rotate your foot simultaneously or alternatively

Instructions: 1- Repeat this exercise for ten times.

2- Do not allow the knees to be stirred, Keep your body straight and erect. Keep your eyes closed

4.4.4 Steps for Knee Bending



Step-1: Sit in Primary Posiion. Bend the



Step-3: Inhale deeply and slowly while straightening your legs. Do not allow the heel or toes to touch the floor. The thighs should get back to the chest level



Step-2: Interlocking the fingers below the thighs. Hold the thighs up to the chest level and keep the heel near the thighs. Keep your arm as straight as possible while bending your elbow

- Instructions:** 1- Pracice this ten imes with both the legs alternately.
2- Remain attentive of your breathing pattern and the thighs.
3-Apply more thigh pressure on your abdomen when you exhale out and carry your thighs close to the chest.
4- Set both the legs back in the basic posiiion after the compleion of exercise.

4.4.5 Steps for Knee Rotaion



Step-1: Sit in the base posiiion. Bend the right leg at the knee. Place the hands under the right thigh and interlock the fingers or cross the arms holding the elbows. Raise the right foot from the ground. Rotate the lower leg from the knee in a large circular movement. Try to straighten the leg at the top of the



Step-2: Rotate 10 imes clockwise and then 10 imes ani-clockwise.

4.4.6 Steps for Knee Cap Tightening



Procedure: Slowly pull the kneecaps upwards and then release them.

4.4.7 Half Butterfly Pose (Ardh Titili Asana)



Step-1: Remain in the primary position



Step-2: Bending the right knee put the right leg on the left thigh as up as possible



Step-3: Allow the right heel to touch the waist



Step-5: This is the first cycle of the practice, Repeat 20 times each with alternate legs

Instructions: You may also perform this exercise with rhythmic breathing



Step-4: Put the right palm on the thigh Grasp the right toe firmly with the left hand. Keep the spinal chord and the neck straight. Hold the left leg straight with the heel touching the floor. Inhaling deep, effortlessly press the knee downward. Now exhale deep but slow, raise the knee up to the chest & Avoid forward bending

4.4.8 Steps for Full



Step-1: Remain in the primary pose. Keep the spinal chord and the neck



Step-3: Place the elbows on the thighs. Inhale deep and press both the



Step-2: Bend both the knees. Bring the soles of the feet together and place them up to the crotch area. Grasp both the paws firmly with your hands.



Step-4: Remove your hands from thighs and try to raise the knees without

Instrucions: 1- Inially attempt this for 20-30
2- Get back to the primary posiion after the practive.
3- Closing your eyes remain focused on the hip joints and the waist
4- Open your eyes after a while

4.4.9 Steps for Waist Rotaion



Step-1: Keep both the legs one meter



Step-3: Make a circle by rotaing your waist staring from the right side

Instrucions: Repeat above steps 10-30



Step-2: Keep your both palms on your



Step-4: Start rotaing your waist ani

4.4.10 Steps for Wrist Rotation



- Step-1:** Sit in Sukhasan. Keep the spinal chord and neck straight.
- Step-2:** Stretch forward both the hands to your shoulder level. Keep the elbow straight and erect.
- Step-3:** Now form a clenched fist with the right hand, placing the thumb inside.
- Step-4:** Grasp firmly the wrist joint of the right hand with the left palm.
- Step-5:** Keep the left thumb on the upper part and the rest four fingers on the lower part.
- Step-6:** Now rotate the clenched fist clockwise and then anti-clockwise.

Instructions: 1- Repeat this ten times with alternate hands.
2- Later simultaneously rotate both the hands in a circular motion without any grip.
3- Do not allow the elbows to bend.

4.4.11 Steps for Shoulder Rotation



Step-1: Place the fingers of the left hand on the left shoulder and the fingers of the right hand on the right shoulder. Fully rotate both elbows at the same time in a large circle.



Step-2: Try to touch the elbows in front of the chest on the forward movement and touch the ears while moving up. Stretch the arms back in the backward movement and touch the sides of the trunk while coming down. Practice slowly 10 times clockwise and then 10 times anticlockwise.

4.4.12 Steps for Neck Bending



Step-1: Sit in the base position or a cross-legged pose with the hands resting on the knees in Gyan or chin mudra. Close the eyes. Slowly move the head forward and try to touch the chin to the chest.



Step-2: Move the head as far back as comfortable. Do not strain. Try to feel the stretch of the muscles in the front and back of the neck, and the loosening of the vertebrae in the neck. Practice 10 times

4.4.13 Steps for Neck Rotation



Step-1: Sit in the base position or a cross-legged pose with the hands resting on the knees in Gyan or chin mudra. Gently turn the head to the right so that the chin is in line with the shoulder. Feel the release of tension in the neck muscles and the loosening of the neck joints.



Step-2: Slowly turn the head to the left as far as is comfortable. Do not strain. Practice 10 times on each side.

4.4.14 Steps for Elbow Stretching



Step-1: Remain in the base position or a cross-legged pose. Stretch the arms in front of the body at shoulder level. The hands should be open with the palms facing up.



Step-2: Bend the arms at the elbows and touch the fingers to the shoulders. Straighten the arms again.



Step-1: Sit in any meditative pose. Keep the spine erect and your head and neck straight. eyes should be closed. Relax the muscles of the body and become aware of your breath. Do not control your breath forcefully.

Step-2: Place the thumb on one nostril and the tip of the ring finger against the other nostril. The thumb and ring finger will be used to close alternate nostrils as you breathe. Begin the exercise by blocking your left side nostril and breathe out with your right nostril



Step-3: Continue to block your left nostril and breathe in using your right nostril. Open your left nostril as you simultaneously cover and block your right nostril. Breathe out slowly using the open left nostril. Once this is done go ahead and breathe in with your left nostril that is open. Close the left nostril and let the air move out through your right nostril that you now leave open.

2.4.8.4.1 Benefits

Following are the benefits of Nadi Suddhi -

- 1- As pure oxygenated air is breathed into the lungs with each cycle, the blood gets purified, and circulation improves
- 2- This pranayama helps strengthen the lungs and increases overall lung capacity.
- 3- Alternate Nostril breathing can help treat disorders of the respiratory system.
- 4- Due to the improvement in blood circulation, the functioning of other organs in the body also improves.
- 5- As circulation improves, energy levels also increase.
- 6- Nadi Suddhi pranayama can help with weight loss as it increases the rate of metabolism.
- 7- It helps calm the nervous system.
- 8- Regular practice helps reduce stress.
- 9- It can improve mental health.
- 10- Alternate Nostril breathing can help remove excess body heat.
- 11- It can help improve appetite.
- 12- Alternate Nostril breathing can help reduce body odour.

2.4.8.5 Steps for Sithili Pranayama



Step-1: Sit in any meditative pose. Keep the spine erect and your head and neck straight. Make Gyan Mudra. Curl your tongue by curving the sides upward. Let your tongue stick out just past your lips. If your tongue doesn't curl, bend the sides up as much as you can and make a slight "o" with your mouth.



Step-2: Inhale deeply through the tongue and mouth. You'll feel a cooling sensation as the air glides through your tongue. Breathe into the belly, filling yourself up.



Step-3: Exhale fully through your nose.

2.4.8.5.1 Benefits

Following are the benefits of Sithili Pranayama -

- 1- It relaxes all the muscles.
- 2- It soothes eyes, ears and purifies the blood.
- 3- It quenches the thirst, appeases hunger.
- 4- Reduces the tension.
- 5- Makes teeth and gums healthy.
- 6- Reduces blood pressure.
- 7- Improves indigestion.
- 8- Improves skin disease.

2.4.8.7.1 Benefits

Following are the benefits of Ujjayi Pranayama -

- 1- Ujjayi Pranayama aerates the lungs, removes phlegm, gives endurance, soothes the nerves and tones the entire system.
- 2- Ujjayi Pranayama without Kumbhaka, done in a reclining position, is ideal for persons suffering from high blood pressure or coronary troubles.
- 3- Ujjayi Pranayama involves shallow breathing aimed at flexing diaphragm. This type of breathing is good for health as it improves oxygenation needed in many body functions.
- 4- Ujjayi Pranayama helps calm the body as it increases the circulation of blood. Ujjayi provides meditative effects by allowing maintaining the tempo of workout session, without any distractions.
- 5- Ujjayi Pranayama helps strengthen the digestive and Nervous system. It helps reduce risk to diseases that are caused by the accumulation of bile, wind or phlegm.
- 6- Ujjayi Pranayama allows eradicating a large amount of wastes from the body, as it improves the circulatory system needed to purify the nerves and tissues.
- 7- Ujjayi Pranayama also clears the lungs and nasal cavity. In addition to that, it has proven an effective remedy against diseases of the respiratory system.

2.4.8.8 Chanting of Om



Procedure: For meditation and relaxation you can Chant Om by sitting in any meditative pose, like Sukhasana, Padmasana or Vajrasana.

2.4.9 Sitting Pose Asanas

Following are the Asanas which can be practiced in Sitting Position -

2.4.9.1 Steps for Paschimottasana



Step-1: Sit down straight with your legs together by stretching them in front of you. keep your head neck and spine erect

Step-2: Now bend your head and trunk slowly forward to catch the toes with the thumb, index and middle fingers without bending knees. Take a deep breath and exhale slowly.



Step-3: Try to touch your head to your both knees. Bend the arm and try to touch the elbow to the floor. Exhale completely and holding out your breath stay in this posture for a few seconds

Step-4: After few seconds slowly return to your staring posiiion and breathe normally. Repeat this for 3-4 imes

2.4.9.1.1 Benefits of Paschimottanasana

Following are the benefits of Paschimottasana -

- 1- It acts as a stress reliever. Remove anxiety, anger, and irritability. Calms the mind.
- 2- Reduces fatty deposits in the abdomen.
- 3- Stretches the spine and brings flexibility.
- 4- Good for constipation and digestive disorder.
- 5- Useful for increasing height.
- 6- Regular practice cures impotency and enhances the sexual power.
- 7- Tones the abdominal-pelvic organs.
- 8- Balances the menstrual cycles.
- 9- This asana is recommended especially for women after delivery.

2.4.9.1.2 Precautions

- 1- Pregnant women should not practice Paschimottasana.
- 2- Person suffering from slip disc or sciatica problem, asthma should avoid Paschimottasana.
- 3- Ulcer patient should not practice.

2.4.9.2 Steps for Gomukhasana



Step-1: Sit with the legs straight



Step-2: Bend the left leg and place it over the right thigh so that the left heel touches the outer side of the right buttock



Step-3: Bend the right leg and place the right heel beside the left buttock. Both buttocks remain on the floor



Step-4: Bring the left arm behind the back from below and clasp the fingers of both hands together



Step-5: The head remains upright and straight and rests on the right forearm. Look up breathing normally hold the position. Return to the starting position & Practice the exercise on the other side

2.4.9.2.1 Benefits

1. Promotes mobility of the shoulders and hips.
2. Strengthening the muscles of the chest and back.
3. Improves a rounded back and sideways curvature of the spine.
4. Facilitates deeper breathing.
5. Simulates kidney function,
6. Activates the bladder and the digestive system.
7. Counters diabetes.
8. Strengthens the finger joints and wrists

2.4.9.4 Steps for Vakrasana



Step-1: Sit down stretching your legs forward on the ground



Step-2 Keep your hands beside your thighs or buttocks. Bend your right leg straight and stretched. Keep the right foot beside the left knee and the right knee raised upward



Step-3: Inhale and raise the arms to shoulder height, keeping the elbows straight. Exhaling, twist to the Right, place the Left arm by the outer side of the Right knee and hold the Right ankle with the Left hand.



Step-4: Take the Right hand behind the back keeping the palms on the floor. Look backward towards the left side

2.4.9.4.1 Benefits

1. Increases the elasticity of the spine and tones the spinal nerves.
2. Stretches the muscles.
3. Helps to get relief in stiffness of vertebrae.
4. Massages the abdominal organs.
5. Reduces belly fat.
6. Regulates the secretion of digestive juices useful for different digestive disorders.
7. Loosens the hip joints, relieving stiffness.
8. Flab on the lateral side of the abdomen gets reduced.
9. Specifically, stimulates Navel chakra or Manipur chakra.

2.4.9.6 Steps for Ustrasana (Camel Pose)



Step-1: Sit on the floor stretching your leg and keeping your spine erect keeping palms on the ground side by the buttocks



Step-2: Bend your leg by the knees and sit on your heels placing the buttocks between the heels.



Step-3: Kneel on the floor keeping your knees in line with the shoulders and sole of the feet facing the ceiling. Keep your hand on waist.



Step-4: Inhale and arch your back and place your palms on the heels of the feet. Keep your arms straight. Do not strain your neck keep it neutral. Let your neck be free. Stay in this final position for couple of breaths or as much longer as you can.



Step-5: Breathe out and slowly come to the normal position withdrawing your hands from the feet.

2.4.9.6.1 Benefits

1. Ustrasana Stretches the anterior muscles of the body.
2. Improves flexibility of the spine and strengthens it.
3. Camel Pose Improves digestion
4. Gives relaxation to the lower back.
5. Useful as an initial practice for back bending.

2.4.9.6.2 Precautions

People suffering from severe back and neck injury, high or low blood pressure, migraine should not practice this asana.

2.4.9.7 Steps for Mandukasana (Frog Pose)



Step-1: Comfortably sit in Vajrasana. Close the fists of your both hands. While clinching the fists press your thumb inside with the fingers



Step-2: While pressing the navel with your both fists exhale and bend forward. Hold the breath when you are in the position of bend forward and keep looking straight

Instructions: Stay in this position for some time, inhale and come back to starting position (Vajrasana). Repeat this for three to four times

2.4.9.7.1 Benefits

1. Increases the quantity of insulin, so it is beneficial for curing diabetes.
2. Cure the problems related to stomach.
3. It is beneficial in cardiovascular diseases.
4. Useful for flexibility of thighs and legs.
5. Reduces extra fat from thighs and hips.
6. It improves the functioning of digestive system and excretory system.
7. It cures the pain of ankles, knees, and back.

2.4.9.7.2 Precautions

1. Those People who are suffering from abdominal injuries and any kind of back pain do not perform the Manduk asana.
2. In the case of knee injury avoid this.

2.4.9.9 Steps for Shankasana



Step-1: Sit in Vajrasana. Place your hands on the thighs and breathe in a relaxed manner



Step-2: Raise both your hands above the head, palms facing forward. The arms should be in line with the shoulders



Step-3: Slowly bend down and bring the hands forward, till the hands and forehead touched the ground. Exhale while you are bending forward



Step-4: In the final position the forehead and hands rest on the ground. Rest in this position for as long as you are comfortable. In the final position slow rhythmic and relaxed breathing can be done. Exhale slowly and come back to the starting position (kneeling pose)

Instructions: Repeat this process for 5 to 10 rounds depending on time and comfort

2.4.9.9.1 Benefits

1. This asana relaxes the mind and relieves depression.
2. It tones the pelvic muscles and relieves sciatic pain.
3. It can help in sexual disorders.
4. It gives a good relaxing stretch to the upper body.

2.4.9.11 Steps for Janusirasana



Step-1: First of all sit down in a basic pose with both the legs broadened in front. Keep your toes and heels together.



Step-2: Slowly curve your left leg such that the left leg foot touches the thigh



Step-3: While breathing out, bend in the forward direction to place your palms ahead of your toes. Hold your right leg toe with both the hands and bow more so that your frontal bone touches the right knee. Hold this position and have normal breathing as long as you're at ease.



Step-4: While breathing in, get back to sitting and rising position



Step-5: Repeat the same process for Left leg

2.4.9.11.1 Benefits

1. Consipation is cured.
2. Meliorates tractableness of sciatic nerve and ankle, knee and hip joints.
3. The ribs become progressively elastic and flexible.
4. Raises functionality capacity of the kidney.
5. Janusirasana increases the stretchable capacity of venous blood vessel and sinews of the backbone.
6. This asana is the most vivid stretching out pose and such poses increments circulation to liver, spleen, and pancreas.
7. This asana provides rest in cases of sciatica.

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8. It arouses thymus gland secretory organ, digesion and immune system.
9. All the troubles of ankle joint, calf-muscles, knees and second joint i.e., thigh disappear by janusirasana.
10. Step-ups flexibleness of the trapezius muscle, deltoid muscle, thighbone and biceps muscular issue and provide strength to last five vertebrae of the backbone.
11. The joints also become flexible and strong.
12. Elongates and forifies hip, ariculaion coxae, shoulders, and backbone.
13. Complete disorderliness of the seminal fluid are healed.
14. Energizes and strengthens the digesive organs, step-ups vermiculaion, remedies consipaion and other troubles.
15. Janusirasana is very beneficial for paients with diabetes.
16. Summons ariculaions and increments snap in the lumbar vertebral column.
17. Troubles of short temper, liver, and bowels are recovered and also improves the digesion process
18. Provide adequate flexibility to back bone and back muscles.
19. Janusirasana helps oneself to balance the level of blood sugar and also the metabolic process.
20. Relieves compression of the spine and sciaica
21. It tones up and stretches out the hamstring tendon.
22. This asana holds healthful consequence on nervus ischiadicus(sciaic nerve).
23. This asana improves concentraion capacity and intellectual endurance of the body

2.4.10 Asans in Prone Condiion

Following are the Asanas which can be praciced in Prone or lying on stomach Posiion -

2.4.10.1 Steps for Bhujangasana



Step-1: Lie down on the floor on your stomach in a comfortable level preferably on yoga mat. Keep your feet together with the tops of them against the floor



Step-2: Now spread your hands on the floor under your shoulders and hug your elbows against your rib cage. After doing this close your eyes, and inhale slowly but deeply. Imagine the stability in your pelvis, thighs and your feet tops. Imagine, that part rooted to the ground



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Step-3: Exhale gradually before opening your eyes, continue breathing process (Inhale- exhale) slowly and deeply. As you inhale, your arm should be steadily straightened. Extend through and deepen your stretch to create a graceful arc in your back. Use the stretch in your legs and back, in place of exerting yourself to gain height and risk overarched the spine.

Step-4: Now press your tail bone towards your pubis and lift your pubis toward your navel, in this, trying to narrow your hips

Instructions: Keep your shoulders broad but in a relaxed position, with the blades low on your back. Now lift from the top of your sternum, but try to avoid pushing the front of your ribs forward. Puff your side ribs forward and keep your lower back in relaxed, and trying to distribute the stretch evenly along your spine. In the process of up and down, inhale when you bent upwards and held your breathe for few seconds, and in the down position exhale. In upward position trying to hold your breathe for some seconds, and release your breathe while getting back to starting position or lying down position.

2.4.10.1.1 Benefits

1. This Asana helps to stretches muscles in the shoulders, chest and abdominal also. It decreases the stiffness of the lower back, and it gives strength to arms and shoulders.
2. It increases flexibility, improves menstrual irregularities in women. Elevate mood, and this can also help in stress, depression, anxiety keep away from our mind. It firms and tones the butt area.
3. Improves the blood circulation and oxygen in body, heart and throughout the spinal and pelvic region especially, and it stimulates organs in the abdomen, like kidneys. It also opens the chest and helps to clear the passages of the heart and lungs.
4. Improves digestion. Gives strength to the spinal cord. Help to soothe sciatica. It also helps to cure the symptoms of asthma.

2.4.10.1.2 Precautions

People who are suffering from back injury are advised not to do this. Also, people having Carpal tunnel syndrome, headache and in the case of Pregnancy do not try this asana.

2.4.10.4 Steps for Shalabhasana (Locust)



Step-1: Lie down on your Stomach; place



Step-2: Breath in (inhale) and lift your Both leg up, (your leg should not bend at the knee). Your chin should



Step-3: After that exhale and take down

Instructions: 1- Repeat this for five to seven

2.4.10.4.1 Benefits

1. It is beneficial in all the disorders at the lower end of the spine.
2. Most helpful for a backache and sciatica pain.
3. Useful for removing unwanted fats around abdomen, waist, hips and thighs.
4. Daily practice of this Asana can cure cervical spondylitis and spinal cord ailments.
5. Strengthening your wrists, hips, thighs, legs, buttocks, lower abdomen and diaphragm.
6. Toughens back muscles.

2.4.10.4.2 Precautions

Don't practice this asana in case if any surgery has been done. First practice Nilabha Shalabhasana then only practice Shalabhasana. Control your breathing while doing this pose

2.4.11 Supine

Following are the Asanas which can be practiced in Supine or 'lying on back' Position -

2.4.11.1 Steps for Straight Leg Raising



Step-1 Lie flat on your back



Step-2: Bend one knee, one leg straight, tighten your abs and raise the straightened leg off the floor. Tighten the muscle on the top of your thigh as you slowly lift your leg, keeping your knee straight



Step-3 Lower it and repeat several times with both legs

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2.4.11.2 Steps for Both Leg Raising



Step-1 Lie flat on your back



Step-2: Bend one knee, one leg straight, tighten your abs and raise the straightened leg off the floor. Tighten the muscle on the top of your thigh as you slowly

2.4.11.4 Steps for Halasana



Step-1: Lie on the yoga mat or carpet and join the legs together



Step-2: Raise your legs to make an angle of 90 degree



Step-3: Thrust the palms, raise the waist and legs, bending forwards curving the back and resing the legs on the floor above head



Step-4 Try to place the big toe on the floor and keep the legs straight



Step-5: Balance the whole weight on the shoulder blade, shift both the hands over the head, join the fingers and hold the head with it and relax the elbows on the floor



Step-6: Try to remain in the position till the count of 100.



Step-7: Then release the fingers above the head, pressing the palms on the floor taking back thumb toe gently bring the body and legs to the floor



Step-8: Relax and practice for 2 rounds more

2.4.11.4.1 Benefits

1. Practicing this asana regularly can avoid disease like diabetes, obesity, consipaion, stomach disorder, Blood pressure and menstrual disorders
2. It makes your back bone elasic and flexible.
3. Halasana helps to reduce both belly and body fat.
4. It improves memory power.

2.4.11.4.2 Precautions

1. Those having neck pain, spondylosis and high blood pressure should not pracice this yoga pose.
2. Pregnant ladies should not try this asana

2.4.11.5 Steps for Pawanmuktasan



Step-1: Lie in the base posiion. Bend the right knee and bring the thigh to the chest. Interlock the fingers and clasp the hands on the shin just below the right knee. Keep the left leg straight and on the ground.



Step-2: Inhale deeply, filling the lungs as much as possible. Holding the breath, raise the head and shoulders off the ground and try to touch the right knee with the nose. Remain in the final posiion for a few seconds, retaining the breath and couning mentally. While slowly exhaling, return to the base posiion.

2.4.11.5.1 Benefits

Pawanmuktasana strengthens the lower back muscles and loosens the spinal vertebrae. It massages the abdomen and the digesive organs and is, therefore, very effective in removing wind and consipaion. By massaging the pelvic muscles and reproductive organs, it is also useful in the treatment of impotence, sterility and menstrual problems.

2.4.11.5.2 Precautions

Not to be performed by persons suffering from high blood pressure or serious back condiions, such as sciaica and slipped disc.

2.4.11.6 Steps for Straight Leg Up Down



Step-1: Lie on the ground. Leg together. Keep your both palm under your buttock.



Step-2: Inhale lift your right leg in 45 degree and left leg 35 degree. Now take your legs up and down movement with normal breath. Repeat 10 counts.

2.4.12 Asanas in Standing Pose

Following are the Asanas which can be practiced in Standing Position -

2.4.12.1 Steps for Virkshasana



Step-1: Stand erect. Spread both arms at shoulder level. Lift Right leg and join it with the Left leg at the thigh.



Step-2: Raise both hand over head and join them

2.4.12.7 Steps for Padahasthasana



Step-1: Stand straight. Legs together, hands by the side of your thighs. Chest must be opened. Now slowly inhale and raise your hand straight upwards over to your head. Your biceps must touch your ears keeping the elbows straight. While stretching do not bend your neck forward. Turn your palms forward.

Step-2: Now slowly exhale and start bending forward with the lower back. Keep your legs straight, do not bend your knees. Keep bending forward. First your abdomen touches your thighs and then your chest.



Step-3: Now you hold your heels of the feet with respective hands and touch your forehead to the knees. Keep your breath out as much as possible or if you can also start normal breathing in the final position. Remain in this position at least for 15-30 seconds.

Step-4: Now first lift up your forehead and the hands from the heels. Then while inhaling slowly start raising up and stand straight. Keep your hands stretched upwards with biceps touching your ears.

Step-5: Slowly start exhaling and bring back your hands down keeping the palm on your thighs. Apart your legs and relax yourself.

2.4.12.8 Steps for Suryanamaskar

Suryanamaskar is a very important yogasan. It has 12 poses, which give benefit to complete body. If someone has less time to do different Yoga, he / she can practice this to get complete benefit of Yoga.

Step 1 (Prayer pose)

Stand at the edge of your mat, keep your feet together and balance your weight equally on both the feet. Expand your chest and relax your shoulders. As you breathe in, lift both arms up from the sides and as you exhale, bring your palms together in front of the chest in prayer position.



Fig. 2.4.2. Prayer pose

Step 2 (Raised Arms Pose)

Breathing in, lift the arms up and back, keeping the biceps close to the ears. In this pose, the objective is to stretch the whole body up from the heels to the tips of the fingers. To get maximum benefits, you may pull the pelvis forward and ensure reaching up with your fingers rather than going backward.



Fig. 2.4.3. Raised Arm Pose

Step 3 (Hand to Foot Pose)

Breathing out, bend forward from the waist, keeping the spine erect. As you exhale completely, bring the hands down to the floor, beside the feet.



Fig. 2.4.4. Hand to Foot Pose

Step 4 (Equestrian Pose)

Breathing in, push your right leg back, as far back as possible. Bring the right knee to the floor and look up



Fig. 2.4.5. Equestrian Pose

Step 5 (Stick Pose)

As you breathe in, take the left leg back and bring the whole body in a straight line and keep your arms perpendicular to the floor.



Fig. 2.4.6. Stick Pose

Step 6 (Saluing with eight points or parts)

Gently bring your knees down to the floor and exhale. Take the hips back slightly, slide forward, rest your chest and chin on the floor. Raise your posterior a little bit. The two hands, two feet, two knees, chest and chin (eight parts of the body) should touch the floor



Fig. 2.4.7. Saluing Pose

Step 7 (Cobra Pose)

Slide forward and raise the chest up into the cobra posture. You may keep your elbows bent in this pose, the shoulders away from the ears. Look up. As you inhale, make a gentle effort to push the chest forward; as you exhale, make a gentle effort to push the navel down. Tuck the toes under. Ensure you're stretching just as much as you can; do not force.



Fig. 2.4.8. Cobra Pose

Step 8 (Mountain Pose)

Breathing out, lift the hips and the tail bone up, chest downwards in an 'inverted V' (∇) posture. If possible, try and keep the heels on the ground and make a gentle effort to lift the tailbone up, going deeper into the stretch.



Fig. 2.4.9. Mountain Pose

Step 9 (Equestrian Pose)

Breathing in, bring the right foot forward in between the two hands, left knee down to the floor, press the hips down and look up and place the right foot exactly between the two hands and the right calf perpendicular to the floor. In this position, make a gentle effort to push the hips down towards the floor, to deepen the stretch.



Fig. 2.4.10. Equestrian Pose

Step 10 (Hand to foot Pose)

Breathing out, bring the left foot forward. Keep the palms on the floor. You may bend the knees, if necessary. Gently straighten the knees and if you can, try and touch your nose to the knees. Keep breathing.



Fig. 2.4.11. Hand to Foot Pose

Step 11 (Raised Arms Pose)

Breathing in, roll the spine up, hands go up and bend backward a little bit, pushing the hips slightly outward. Ensure that your biceps are beside your ears. The idea is to stretch up more rather than stretching backward.



Fig. 2.4.12. Raised Arm Pose

Step 12

As you exhale, first straighten the body, and then bring the arms down. Relax in this position; observe the sensations in your body.



Fig. 2.4.13. Namaskar Pose

4.12.8.1 Benefits of Surayanaskar

Following are some of the main benefits of Suryanamaskar -

1. Improves Blood Circulation of the Body

Due to the active process of inhalation and exhalation, the lungs are constantly ventilated, and the blood remains oxygenated. It's a great way of detoxing your body and helping it get rid of excess carbon dioxide and other toxic gases

2. Your Mantra to Weight loss

When done at a fast pace, it is a great cardiovascular workout that stretches the abdominal muscles while simultaneously helping you reduce excess weight around your stomach. The asanas also result in toning your arms, abs and giving great flexibility to your spine. Moreover, It helps to strengthen your entire skeletal system including your ligaments

3. Promotes a Regular Menstrual Cycle

If you're facing the problem of an irregular menstrual cycle, these asanas will help you suppress this irregularity and if practiced daily, it ensures an easy childbirth

4. Benefits your Skin and Hair

By incorporating it in to your routine, it will keep you youthful and healthy even in old age. It improves your blood circulation that aids in bringing back the glow on your face; preventing the onset of wrinkles, making your skin look ageless and radiant. It also prevents hair loss and the aging of hair

5. Anti-anxiety and Calming Properties

Surya Namaskar helps to improve memory and the nervous system. Moreover, it stabilizes the activity of the endocrine and thyroid glands, thereby reducing anxiety and inducing the sensation of complete calmness and tranquility

2.4.13 Kriyas

Kriyas are cleansing practices. In that sense, we all practice kriyas daily. Bathing, washing the face, brushing the teeth all are kriyas. But yoga kriyas refer to special yoga techniques developed by the yogis, meant to cleanse the inner organs.

They are:

1. Trataka for eyesight.
2. Neti for upper nasal tract (from throat to nostrils)
3. Kapalabhati for lower respiratory tract (from nostril to lungs)
4. Dhauti for upper gastrointestinal tract (GIT) up to the stomach.
5. Nauli for abdominal viscera (Agnisara is the preparatory phase for nauli)
6. Basti for lower gastrointestinal (GIT) especially the rectum.

4.13.1 Steps of Kapalbhai



Procedure: Sit in any meditating posture. Keep your head, neck, and spine erect. Close your eyes and collapse the shoulder. Normal your breath. Relax the whole body completely. Practice rapid breathing with active and forceful exhalation and passive inhalation. During each exhalation blast out the air by vigorous flapping movements of the abdomen in quick succession. Inhale passively by relaxing the abdominal muscles at the end of exhalation. Repeat the exhalation as quickly as possible at the rate of 60 strokes in 1 minute. At the end of one minute, stop the practices.

4.13.1.4 Benefits

1. Brain cells are invigorated.
2. It brings brightness to the face.
3. It balances and strengthens the nervous system.
4. It aids digestion and removal of acidity and gas related problem.
5. Regular practices of kapalabhai is also beneficial for belly fats loss.
6. It activates the body and removes lethargy.
7. It is good for asthma person.

4.13.1.2 recauions

Practice of kapalabhai is to be avoided in following conditions -

1. Moderates and serve high blood pressure or Ischemic heart disease
2. Vertigo
3. Epilepsy
4. Hernia or Gastric ulcer
5. Slip disc or Spondylosis
6. women during menses or Pregnancy

4.13.2 Sukhma Tratka – Jathru Tratka

Palming: Sit quietly and close the eyes. Rub the palms of the hands together vigorously until they become hot. Place the palms gently over the eyelids, without any undue pressure. Feel the warmth and energy being transmitted from the hands into the eyes and the eye muscles relaxing. The eyes are being bathed in a soothing darkness. Remain in this position until the heat from the hands has been absorbed by the eyes. Then lower the hands, keeping the eyes closed. Again rub the palms together until they become hot and place them over the closed eyes. (Make sure the palms and not the fingers cover the eyes). Repeat this procedure at least 3 times.

Benefits: Palming relaxes and revitalises the eye muscles, and stimulates the circulation of the aqueous humour, the liquid that runs between the cornea and the lens of the eye, aiding the correction of defective vision.

Precautions: The benefits are enhanced if the exercise is practiced in front of the rising or setting sun. Be aware of the warmth and light on the closed lids. Never look directly at the sun except for a few initial moments when it is just rising or when it is about to set.

Blinking: Sit with the eyes open. Blink the eyes 10 times quickly. Close the eyes and relax for 20 seconds. Repeat the blinking 10 times quickly and then again close the eyes and relax. Repeat 5 times.

Benefits: Many people with defective eyesight blink irregularly and unnaturally. This is related to the state of habitual tension in the eyes. This exercise encourages the blinking reflex to become spontaneous, inducing relaxation of the eye muscles.

2.4.13.3 Nei

Nei is for cleansing of the nasal passage. It is of two types -

1- Jal Nei (with water) & 2- Sutra Nei (with Rubber tube)

2.4.13.3.1 Steps of Jal Nei



1- Take 1 mug of lukewarm water. Add 1-2 tea spoon of salt. Put salt water in nei pot

2- Stand with leg apart and hold the nei pot in right hand.

3- Insert the nozzle of nei pot into right nostril.

4- Keep the mouth open and breathe through the mouth. Breathe freely through the mouth.

5- Bend forward from the lower back, slightly bend your head left side and put the nozzle in right nostril and come out through left nostril (lukewarm water) by gravity.

6- Allow the flow until the pot is empty.

7- Repeat the same procedure from the left side.

8- To clear the nasal passage of the remaining water blow out the water by active exhalation through alternate nostril as in kapalabhai.

2.4.13.3.2 Steps of Sutra Nei



- 1- Insert the end of a thin and soft rubber catheter horizontally into the right nostril.
- 2- Slightly lift your head back.
- 3- Insert the right index and right middle finger inside your mouth and catch the catheter at the back of the throat.
- 4- Take out the last part of the catheter through the mouth and give a gentle massage to the whole nasal passage.
- 5- Then slowly remove the catheter from the nose.
- 6- Repeat same practices from the left side.



Fig. 2.4.14. Performing Sutra Neti

4.13.4 Steps for Jalandhar Bandhas



Step-1: Assume the meditative pose like *Padmasana* or *Siddhasana*. Keep the spine straight. Place the palms on the knees and make sure that the knees are firmly touching the floor. Close your eyes and relax the body. Breathe normally. Now inhale slowly and deeply and then hold the breath.

Instructions:

Step-2: Contract the throat muscles and bend the head forward so that the chin touched the chest. Adjust the chin position so that it rests between the two collar bones in the pit of the throat. Straighten the arms and press the knees down with the palms to create a kind of locked position. The shoulders are slightly hunched forward to make sure the arms stay locked

- 1- Hold this position for as long as you are comfortable. Remember the breath is held inside.
- 2- Do not strain or overdo the holding of breath. Beginners should hold the breath for just a few seconds. Later it can be increased to a minute or more depending on your capacity. Experienced yogis, however, can maintain the chin lock for three minutes or more.
- 3- To release the lock bend the arms, raise your head and exhale out. Come back to the straight position and take few normal breaths.
- 4- Repeat the process as many times as you feel comfortable. Once you have mastered the *Jalandhara Bandha* with breath held inside, you can experiment with the breath held outside. This requires a little practice and should be achieved slowly without straining. Hold the breath outside for just a few seconds initially. Later you may increase it to minute depending on your capacity. Experienced practitioners can even hold the breath outside for two minutes or more. But this has to be done with caution. One should not feel any suffocation while holding the breath either inside or outside. Release the lock when you feel the slightest discomfort and breathe normally.
- 4- The duration of the practice should be increased very gradually.

5- *Kumbhaka* or holding of breath should not be practiced by those suffering from high blood pressure.

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Hence they should not do the practice of
Jalandhara Bandha.

Also, those suffering from cervical spondylitis and heart diseases should avoid *Jalandhara Bandha*. Stop the practice if dizziness or vertigo is felt. The *Gheranda Samhita* says that the *Jalandhara Bandha* can be perfected in a period of 6 months and that it gives psychic powers or siddhis to the practitioner

4.13.4.1 Benefits

1. The *Jalandhara Bandha* effectively closes the air passage and blocks the flow of air. This is used in the practice of *Kumbhaka* or holding of breath by yogic practitioners.
2. *Jalandhara Bandha* presses against two important glands – the thyroid and the parathyroid glands. These two glands regulate the body metabolism.
3. The throat region is the seat of the *Vishuddhi Chakra*. *Jalandhara Bandha* helps to activate the throat chakra. When activated, it is said to give immortality. The *Gheranda Samhita* says that *Jalandhara Bandha* gives victory over death. Here the meaning of death is not the death of the body. Rather it means that the yogi can control the physical changes that happen in the body. It can mean that an anti-aging process is achieved by activation of the *Vishuddhi Chakra*. This is the meaning of immortality in this context. It is also said that a fluid called *Amrita* or nectar falls from a center in the brain called *Bindu Visarga*. This nectar falls through the throat and gets burned at the *Manipuraka Chakra*. Yogis use the *Jalandhara Bandha* to prevent the nectar from going down the throat, thereby attaining immortality.
4. *Jalandhara Bandha* prevents the prana Shakti from moving upwards. When practiced with moola bandha, it can create a lock of the prana (upward moving energy) and apana (downward moving energy) in the body. The two energies mix and awaken the Navel Center or the *Manipuraka Chakra*.
5. *Jalandhara Bandha* is one of the three yogic locks that have to be mastered before attempting the *Maha Bandha* or the triple lock.

4.14 Mudras

In Yoga, there are various mudras used for meditation purpose. Following are some of the main mudras –
(PLEASE MENTION , HOW MANY MUDRA SHOULD BE COVERED)

2.4.14.1 Gayan mudra



Procedure: Sit down in a meditative pose such as the Sukha Asana (Easy Pose), Vajra Asana (Diamond Pose), or Padma Asana (Lotus Pose). You may even perform the Gyan Mura while standing in the Tada Asana (Mountain Pose) or sitting comfortably on a chair. Ensure that your back is held straight and your chest and head held up high. Rest your hands on your knees with your palms facing upwards. Touch the tip of the index finger to the tip of the thumb. The rest of the finger should be held straight and parallel to each other. This Mudra is performed with both hands. Close your eyes and focus on your breath.

Tips



To further enhance the effectiveness of the Gyan Mudra, you may chant the word Om (Aum) in conjunction with every exhale.

2.4.14.1.1 Benefits

One of the main benefits of the Gyan Mudra is its ability to relax the body and focus the mind on the task of meditation. It also helps to relieve stress and transcend worldly problems.

2.4.14.2 Steps for Chin mudra

Step-1: Form a circle by joining your thumb and your forefinger. Place the nail of your index finger against the soft pad of the thumb.

Step-2: Extend the last three fingers of your hands, the palm-side facing upward.



Fig. 2.4.15. Chin Mudra

2.4.14.2.1 efits

1. Creaion of a Pranic circuit, which maintains and redirects the “Prana” or the flow of energy within your body
2. Improvement and increase in concentraion, even during meditaion
3. Increasing energy and stamina
4. Promoion of better sleep patterns
5. Reducion of common ailments like lower back pain
6. Relieving stress and any unnecessary tension in the body
7. Simulaion of the energies based on the Mooladhara Chakrahree fingers of your hands, the palm-side facing upward.

2.4.14.3 Chinmaya Mudra



Procedure: Create Chin Mudra. Place your palms on the upper thighs. Keep the eyes closed and breathe through the nose.

Instrucions: Start pracicing the mudra for 10 minutes and gradually increase the duraion for up to 45 minutes

2.4.14.3.1 efits

1. Promotes flow of prana
2. Posiively impacts the energy in the thoracic region
3. Promotes breathing in the mid secion of the lungs
4. Improves digesion

2.4.14.4 Steps for Adi mudra

Adi mudra is formed by placing the thumbs into the palms and curls the other fingers over the thumbs.

Step-1: Place the 'fists' down onto the thighs, with the backs of the hands higher.

Step-2: Slow rhythmic breathing in a 4:3:6:3 ratio (Inhale: 4, keeping air inside: 3, Exhale: 6, Keeping belly empty without air: 3).

Step-3: Repeat this cycle for 7 times.



Fig. 2.4.16. Adi Mudra (close-up)



Fig. 2.4.17. Sitting in Adi Mudra

2.4.14.4.1 efits

1. Increases the vital capacity of the lungs
2. It helps the organs to function actively
3. Increases oxygen flows to the throat and head area
4. It quiets the nervous system

2.4.14.5 Steps for Brahm Mudra

Step-1: Place the thumb at the base of the small finger, and the remaining fingers curl over the thumb, forming a light fist.

Step-2: The palms are placed on the thighs facing upwards.

2.4.15 Meditaion

Meditaion is a practice for mind by which we make mind thoughtless so that we can attain peace. As we know that mind always thinks something no matter how much we try to control it. By regular practice of meditaion, we can control the mind, which gives us lot of peace, calmness, and power on our self.

2.4.15.1 Dharna

Dharna is part of Raj Yoga. It means the concentration of mind. This is required for dhyana or meditaion. We can consider it as a base of meditaion also.

- Q1. Following is not a famous Indian Ancient Text:**
a. The Ramayana
b. The Mahabharata
c. The Bible
d. The Geeta
- Q2. Which Indian Sage consolidated Yoga Asans as Yoga Sutras:**
a. Ved Vyas
b. Patanjali
c. Bhardwaj
d. Dayanand Saraswai
- Q3. Which of following is a Part of Veda:**
a. Rig Veda
b. Sama Veda
c. Atharv Veda
d. All of above
- Q4. Which of the following is also the book of rituals:**
a. Rig Veda
b. Sama Veda
c. Yajur Veda
d. Atharv Veda
- Q5. The Ramayana is story of which God:**
a. Krishna
b. Rama
c. Shiva
d. None of the above

- Q6. Human Body has ---- bones:**
a.
206
b.
306
c. 106
- Q7. The main function of Heart is to:**
a. Pump blood to all parts of body
b. Inhale Oxygen
c. Digest the food
d. Move the body parts
- Q8. The main function of Muscle to:**
a. Pump blood to all parts of body
b. Inhale Oxygen
c. Digest the food
d. Move the body parts
- Q9. Which of these is not a part of Sattavic Diet:**
a. Milk
b. Fried patatos
c. Raw Fruit
d. Vegetables
- Q10. Which of following is not part of Body loosening exercises :**
a. Hip Rotaion
b. Side Bending
c. Halasan
d. Frog Jump

3. Maintain Health & Safety at the Work Place

Unit 3.1 - Work Place Safety

Unit 3.2 - Safety During Yoga

Unit 3.3 - Handling Fire and Other Emergencies

Key Learning Outcomes

At the end of this module, you will be able to:

1. Explain what is hazard
2. Describe safety hazards associated with Yoga.
3. Explain various safety precautions to be taken during Yoga practice.
4. Describe various emergency situations at work place.
5. Describe common injuries at work place
6. Describe First Aid box and its constituents
7. Demonstrate how to handle Fire Emergencies

UNIT 3.1: Workplace Safety

Unit Objectives



At the end of this unit, you will be able to:

1. Explain what is hazard
2. Identify Hazards at a Yoga Center
3. Describe Safety Precautions to be taken at a Yoga Center

3.1.1 What is Hazard?

'Hazard' is a set of conditions, which can be a risk to health or life. It can be an atmosphere of work place or construction of a machine or working procedure. Anything out of these can be a Hazard.

For understanding it better, we can see Examples of various hazards and threat possessed by them.

Oil on the floor creates a Slip hazard. Use of Asbestos causes Cancer and other breathing problem hazards. Use of broken electric wires creates electrocution hazard and fire hazard by potential sparking out of it.



Fig. 3.1.1. Hazard

3.1.2 Hazards at a Yoga Center

Apart from some common hazards of working areas, Yoga industry has some exclusive hazard, which are associated with making postures during Yoga.

First, we will learn common hazards of workplace in detail –

3.1.2.1 Manual Handling

Around 40% of the total accident at workplaces is reported due to this cause.



Fig. 3.1.2. Hazard of manual handling

3.1.2.2 Accident by Moving or Falling Objects

This is one of the other big hazards at the workplace. There are many big and heavy things at workplaces which are difficult to manage manually. During transportation also, if they are not secured properly then there is a chance that they may fall from moving the vehicle or can fall on the person who opens the door of the closed transportation vehicle. Special safety arrangement should be made to load heavy objects.



Fig. 3.1.3. Accident by moving / falling object

3.1.2.3 Slips and Falls

This is also one of the biggest reasons for workplace accidents. The floor of the workplace should be free from any oil or slippery material. Also, aisles should be clutter free so that movement of persons and trolleys remains smooth.



Fig. 3.1.4. Slip or fall

3.1.3 Other Hazards

Apart from above hazards, there are some other hazards which are very dangerous. These are following -

- 1- Physical Hazard
- 2- Chemical Hazard
- 3- Ergonomic Hazard

3.1.3.1 Physical Hazard

Physical hazards are the type of energies that may be hazardous to workers. Following are examples of physical hazards –

- 1- Noise
- 2- Vibration
- 3- High Temperature
- 4- Very Low Temperature



Fig. 3.1.5. Noise from Music

3.1.3.2 Chemical Hazard

There are many chemicals that are used in workplaces. Prolonged exposure to these chemicals without using effective PPEs can affect human body adversely. There are 3 ways of getting affected by chemicals.

- 1- Inhalation
- 2- Ingestion
- 3- Absorption

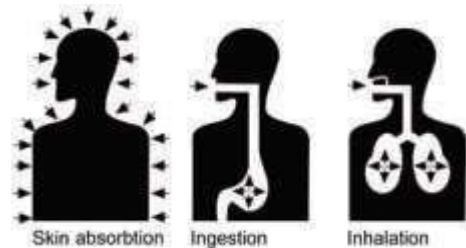


Fig. 3.1.6. Affects from chemical

3.1.3.3 Ergonomic Hazards

Ergonomic hazards can cause painful and disabling injuries to joints and muscles. These can occur from:

- Heavy, frequent, or awkward lifting
- Repetitive tasks
- Awkward grips, postures
- Using excessive force
- Over exertion
- Using wrong tools for the job or using tools improperly
- Using improperly maintained tools
- Hand-intensive work

Correct Lifting position

- Chin tucked in
- Comfortably straight back
- Leaning slightly forward
- Arms close to body
- Secure grip
- Bent knees & Proper foot position.



Fig. 3.1.7. Ergonomic hazard due to difficult postures in Yoga

3.1.4 Special Hazards in Yoga Center

Following are some special Hazards associated with Yoga Center -

- Falling hazard while doing upside down Yoga poses, like - Shirshasana or Sarvangasana.
- Ergonomic hazard of Muscle pulling while doing difficult poses with a stiff body, like Paschimottanasana.
- Neck pain hazards while doing difficult poses like- Sarvangasana.
- Severe Back pain or Slip disc hazard while doing difficult poses like- Halasana.
- Tearing ligament while doing some special asanas.
- Sprained ankle hazard while doing some asanas, like - Vajrasana.

3.1.5 Safety Precautions during Yoga

Following are the precautions to be taken while doing yoga -

- 1- First and foremost precaution is to do Yoga in the supervision of some trained Yoga Instructor only.
- 2- Get doctor's advice before starting Yoga, especially after the age of 30 years.
- 3- Do not push yourself beyond your body's flexibility limit.
- 4- Never compete with anybody while doing difficult poses or holding a yoga pose for longer durations. Every person has different ability to do yoga, and everyone should respect its own body's endurance limit.
- 5- Do not attempt Yoga immediately after eating or drinking something, there should be a gap of minimum 3 to 5 hours after your last meal.



Fig. 3.1.8. Assistance from Yoga Instructor for avoiding injury

TIP



A board detailing the above precautions can be put up in Yoga Room so that all practitioners should remember these.

Notes





UNIT 3.2: Safety during Yoga

Unit Objectives

At the end of this unit, you will be able to:

1. Describe Safety Hazards associated with Yoga.
2. Explain various safety precautions to be taken during Yoga practice

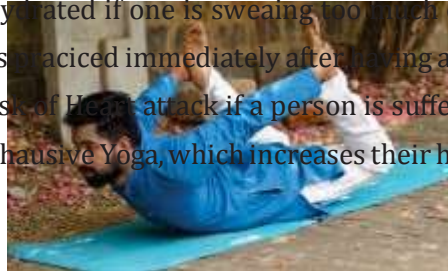
3.2.1. Safety Hazard During Practicing Yoga

Although Yoga is for improving one's health, but if not done correctly it may cause harm to the body also. During Shirshasana, one may fall and get injured. Similarly, Sarvangasana has the same hazard. In some asanas, like Halasana - one may overstretch one's back and may get injured. The threat of Back injury is also present in forward and backward bend and during Paschimottasana.

New practitioners may pull their muscles if warm up is not done properly or difficult posture asana is done without precautions.

One may get dehydrated if one is sweating too much during Yoga. There is a chance of vomiting if yoga is practiced immediately after having a meal.

There is also a risk of Heart attack if a person is suffering from Heart disease and he / she does very exhaustive Yoga, which increases their heart rate very high.



ig. 3.2.1. One of the difficult poses of Yoga (Dhanurasana)

3.2.2 Safety Precautions While Practicing Yoga

There are many threats present while practicing Yoga, but these all can be avoided if it is done under supervision and with some precautions. Following are the precaution one must take during Yoga exercises -

3.2.2.1 Medical Condition of Yoga Practitioner

New Practitioner must get him / herself medically checked completely. One must take one's doctor's advice before taking up Yoga exercises.

There are certain Yoga exercises, which should not be done by Heart patients or person suffering from other diseases. On review of medical reports, Yoga Instructor can advise properly which exercises need to be avoided.

Participant Handbook

Starting Yoga, without knowing your medical condition may harm you very severely. We need to understand that all yoga postures are not advisable to all the persons.

3.2.2.2 Yoga Under Supervision

New Practitioner must start yoga under good supervision only. Yoga Instructor is required to give continuous advice for improvement. Yoga Instructor is also helpful in giving initial support while taking up difficult yoga postures.

It is ok to practice some easy Yoga Postures after reading the book or by seeing the video. But difficult postures, such as Shrisasan or Halasan must be done under Yoga Instructor supervision only.

3.2.2.3 Don't Push Body Too Much

Initially, the body of Yoga Practitioner would be stiff, and he / she might be over enthusiastic for doing difficult yoga postures by seeing videos or fellow yoga practitioner. In that scenario, he / she might want to push his / her body to its limits of bending or straining. But you should not let him/her cross the limit and should allow his / her body to adjust. You should increase the intensity of Yoga Posture, gradually. You should continuously counsel them to have patience in doing difficult yoga postures.

3.2.2.4 Practicing Yoga with Empty Stomach

You should ensure that yoga should be practiced with an empty stomach. There are many yoga postures in which you pose upside down or put pressure on your stomach. If you are not empty stomach, you could vomit, or there could be a pain in stomach. Ideally, you should keep a gap of 3 to 5 hours after your last meal.

3.2.2.5 Do not Drink Too Much Water during Yoga Pracice

You should avoid drinking too much water during Yoga pracice. The temperature of the room plays a great role in this. If there is too much heat in the Yoga room, then you tend to sweat more and feel more thirsier. Hence you should do yoga at a comfortable temperature. If you really have to drink water then take only a few sips of water.

3.2.2.6 Take Precauions in Pracicing Yoga During Pregnancy

You can pracice Yoga during pregnancy, but you need to take expert Yoga Instructors advice on the type of Yoga to be done and for other precauiions. If precauiions are not taken, there could be a complicaion in pregnancy and person may face aborion also.

3.2.2.7 Precauions in Pracicing Yoga During Menstruaion

You should avoid asanas in which you have to elevate your pelvis higher than your heart. You should also avoid the postures which put pressure on your lower abdomen.

3.2.2.8 Precauions During Back Bending Yoga

Never bend your back too much in iniial attempts. Gradually increase the intensity. Bending your back too much or bending it with a jerk may cause harm to your back.

3.2.2.9 Precauions During Upside Down Yoga Poses

Iniially, always take support doing upside down yoga. There is a big risk of falling ill the ime you master these poses. Also always do these asanas under supervision.

3.2.2.10 Precauions For Heart Paients

There are some yoga poses which are prohibited for Heart paients. Persons undergone Bypass Surgery or Angioplasty must avoid all upside down poses and yoga postures which put Heart under strain.

[Type text]

3.2.2.11 Duration of Yoga Poses

You should immediately leave a Yoga pose if you are feeling uncomfortable or feeling unbearable pain in any of your body part. Putting your body under undue stress may cause more harm than benefit.

3.2.2.12 Avoid Competition

When doing Yoga in a group, it is natural to have a feeling of competition in doing difficult pose or doing it for a longer period. You need to understand one thing that everybody has the different ability for bending or enduring the pain. Everyone gets the benefit of yoga (some less and some more), even if it is done for a shorter period. You should give your body some time to adapt to Yoga. In competition, you may harm your body.

Notes



UNIT 3.3: Handling Fire and Other Emergencies

Unit Objectives



At the end of this unit, you will be able to:

1. Define what is emergency
2. Describe various emergency situations at workplaces
3. Describe common injuries at workplaces
4. Describe First Aid box and its constituents
5. Demonstrate how to handle Fire Emergencies
6. Demonstrate how to use a multipurpose Fire Extinguisher
7. Describe type and class of Fires
8. Describe suitable fire extinguisher as per fire type and class

3.3.1 What is Emergency?

An Emergency is a sudden or unexpected state of the situation, which, if not tackled properly, will lead to loss of property, health or life. In cases where any mitigation is not possible, immediate evacuation is needed.

3.3.2 Emergency Situation at Work Place

There are various emergency situations at workplace. Some of them are –

- 1- Accident Emergency
- 2- Electric shock Emergency
- 3- Medical Emergency
- 4- Natural Disaster Emergency – Flood, Earthquake, Tsunami, etc.
- 5- Fire Emergency

For first 3 emergencies, we need to give first aid and immediately call Ambulance.

For Natural Disaster we should take shelter at a safe place or follow company's emergency procedure.

For Fire Emergencies we will discuss in detail. First, we will understand about common Injuries at the workplace and their First Aid.

[Type text]

3.3.3 Common Injuries at work and How to deal with them

As per nature of workplace, it is very difficult to eliminate the threat of accidents at workplaces. However, by using safety precautions, we can minimize the occurrence of accidents. Following are common injuries and their First Aid instructions -

3.3.3.1 Abrasions and Small Cuts

Clean wound with soap and water. Apply antibiotic cream or Providone-iodine solution. Bandage and check dressing daily. See your doctor if there are signs of infection: increased redness, pus or red lines running from the wound.



Fig. 3.3.1. Abrasions

3.3.3.2 Splinters

Remove with sharp, pointed tweezers. (They should be sharp enough to pick up a single hair.) If the splinter is completely under the skin, expose splinter end with sewing needle doused in alcohol, and then remove with tweezers.



Fig. 3.3.2. Splinters

3.3.3.3 Lacerations

Clean wound with soap and water. Assess damage: If The laceration is gaping or more than 1/4 inches deep, seek emergency help. Otherwise, apply pressure to stop bleeding. Close wound with butterfly closures or adhesive strips. Check dressing daily.



Fig. 3.3.3. Lacerations

3.3.3.4 Fractures

Signs include extreme pain, swelling, bruising and an inability to move an adjacent joint. If you have any of these signs, you should be seen by a doctor to see whether you need an X-ray to evaluate for a fracture.



Fig. 3.3.4. Fractures

3.3.3.5 Amputations

Apply pressure to wounded area with a clean bandage. Don't panic. Call for help. Raise wounded area above the heart. Wrap amputated appendage in a plastic bag. Keep appendage cool, not directly on ice. Sit in a chair near the door, and await help.



Fig. 3.3.5. Amputation

3.3.3.6 Eye Injuries

Look in the mirror to assess eye. If foreign matter is embedded in the eye, go to the emergency room. If foreign matter is on the surface, flush it out with water, or use eye wash and cup. For chemical splashes, flush with running water for five to 10 minutes. If it hurts too much to open your eye, go to the emergency room.



Fig. 3.3.6. Eye injury

3.3.3.7 Fumes and Dust

If you feel dizzy or are having trouble breathing, leave the area, and go to fresh air. If normal breathing doesn't return in 15 minutes, go to the emergency room.



Fig. 3.3.7. Fumes and dust

3.3.4 Basic Things in First Aid Box

Top shelf: An asthma inhaler to counteract allergic reactions of fumes and dust; sharp scissors for cutting bandages; adhesive tape for bandaging; an elastic bandage for securing dressings.

Middle shelf: Needles for splinter removal are stored in sterile alcohol; splinter tweezers, precise enough to pick up a single hair; 4-inch by 4-inch gauze pads for bandaging; assorted adhesive strips for small cuts; a clean plastic bag for amputated parts; sterile rolled gauze for bandaging; butterfly bandages for drawing together larger lacerations.

Bottom shelf: Povidone-iodine solution for killing germs; eyewash and cup; a small mirror for eye inspections; instant ice packs to reduce swelling or for transporting amputated parts to the hospital; latex gloves for eye examinations.



Fig. 3.3.8. First aid box

3.3.5 Handling Fire Emergencies

Fires and explosions can severely damage or destroy premises or plant. There have been cases numerous fires started due to either badly maintained cables at the workplace, electric sparks, or due to open wood burning stoves and cigarettes.

Make sure that all electric equipment are cleaned, and that dust is not allowed to accumulate. Report any defects you see in equipment.

TIP



Although workplaces, especially office area or Yoga Center, have a low risk of fire because the workplace has very few inflammable substances like wood, petrol, and chemicals, etc. Still, it is necessary to have fire-extinguishing equipment inside the workplace, and all employees should be trained properly to use these equipment.

3.3.6 Type of Fire Exinguishers

Water Exinguishers: It is used to exinguish the fire on wood, paper, cloth, etc. It should not be used to exinguish the fire over electrical equipment.

Foam Exinguishers (Foam Exinguishers): It is used to exinguish the fire caused by kerosene, spirit, thinner, etc. It also should not be used to exinguish the fire caused by electrical equipment.

Dry Powder Exinguishers (Dry Powder Exinguishers): This is used to exinguish – the fire evolving due to flammable liquids such as petrol, diesel, etc.

Carbon di oxide Fire Exinguisher: Carbon Dioxide evolves from this fire exinguisher, and it can be used to exinguish fire over electric equipment, liquid gases, or fluids.

These fire-exinguishing equipment should be installed at the proper place, and it should be inspected, repaired and refilled regularly.

3.3.7 Fire Exinguishers Chart

Extinguisher		Type of Fire				
Colour	Type	Solids (wood, paper, cloth, etc)	Flammable Liquids	Flammable Gasses	Electrical Equipment	Cooking Oils & Fats
	Water	✓ Yes	✗ No	✗ No	✗ No	✗ No
	Foam	✓ Yes	✓ Yes	✗ No	✗ No	✓ Yes
	Dry Powder	✓ Yes	✓ Yes	✓ Yes	✓ Yes	✗ No
	Carbon Dioxide (CO2)	✗ No	✓ Yes	✗ No	✓ Yes	✓ Yes

Fig. 3.3.9. Fire exinguisher chart

3.3.8 Class and Type of Fires

Class	Type
A	Wood, Paper, Ordinary Combustibles Extinguished by Cooling and Quenching Using Water or Dry Chemicals
B	Gasoline, Oil, Grease, Other Greasy Liquids Extinguished by Smothering, Cooling or Heat Shielding using Carbon Dioxide or Dry Chemicals
C	Electrical Equipment Fires Extinguished with Non-conducting Agents such as Carbon Dioxide or Dry Chemicals. DO NOT USE WATER.
D	Fires in Combustible Metals Extinguished by Using Specialized Extinguishing Powders

3.3.9 Class and Type of Fire Extinguisher to be used

Class of Fire	Fire Extinguisher Type
B or C	Regular Dry Chemical
A, B, C, or D	Multi-Purpose Dry Chemical
D	Purple K Dry Chemical
B or C	KCL Dry Chemical
D	Dry Powder Special Compound
B or C	Carbon Dioxide (Dry)
B or C	Halogenated Agent (Gas)
A	Water
A	Water With Ani-Freeze
A or B	Water, Loaded Steam Style
B,	Foam

3.3.10 How to Respond in Case of Fire

When fires occur, the role of a person is to minimize the damage, he / she should be -

- Extinguishing small fires
- Assising in evacuaions
- Noifying the local Fire Brigade promptly

TIP



- 1- Do not use water on Types B, C or D fires.
- 2- If it is used on Type B fire, it can spread the flames.
- 3- Water conducts electricity, so if it is used on Type C fire, it can cause a major shock.
- 4- If it is used on Type D fire, it will react violently causing an explosion.

3.3.11 How to Operate a Multipurpose Fire Extinguisher

Remember **PASS**

P-Pull the pin In some models, you may have to remove a locking pin.

A-Aim Aim low. Direct the hose or cone to the base of the fire.

S-Squeeze Squeeze the handle. This will release the contents of the extinguisher.

S-Sweep Sweep from side to side. Don't lessen the pressure on the handle. Try to keep it constant.



Fig. 3.3.10. Method of operating Fire extinguisher

TIP

It is important that you get fire extinguisher training before you have to use one. You don't want to waste valuable time trying to read directions or figure out how to remove a pin in an emergency situation. Other important information, like how far to stand away from a fire, when to move towards it, and how long the extinguisher contents last can only be understood by actually operating one. Make sure your employer and your Safety and Health Representative know that you need this training.

Exercise

Q1. Which of these is correct meaning of hazard?

- a. It is a set of good conditions at work place
- b. 'Hazard' is a set of conditions, which can be a risk to health or life
- c. The condition of no production is called hazard
- d. None of the above

Q6. Which of these is not part of the Safety procedure of an Organisation?

- a. Safety Equipment to be used in organisation
- b. Maximum leave an employee can take in a month/year
- c. Emergency Evacuation plan
- d. Hazards of different processes of organisation

- | | |
|---|---|
| <p>Q2. Which if these is the main hazard of any workplace:
a. Manual Handling
b. Accident by moving or falling object
c. Slips and falling
d. Dust and Fumes</p> <p>Q3. Which of these is the type of hazards:
a. Chemical hazard
b. Physical hazard
c. Ergonomic hazard
d. All of above</p> <p>Q4. Which of these is a way of getting affected by chemicals:
a. Inhalaion
b. Ingesion
c. Absorpion
d. All of the above</p> <p>Q5. Which of these is not a reason for Ergonomic hazard?
a. Heavy, frequent, or awkward lifting
b. Awkward grips, postures
c. Noise
d. Hand-intensive work</p> | <p>Q7. Water cannot be used for dousing which type of Fires:
a. 'B' Type fire
b. 'C' Type fire
c. 'D' Type fire
d. All of the above</p> <p>Q8. Electric fires should be extinguished by ---- fire exinguisher:
a. Water
b. Foam
d. None of the above</p> <p>Q9. Which of these should be part of First Aid box:
a. sharp scissors
b. adhesive tape
c. Providone-iodine soluion
d. All of the above</p> <p>Q10. Which of these is Class A Fire:
a. Wood, Paper, Ordinary Combustibles
b. Gasoline, Oil, Grease, Other Greasy Liquids
c. Equipment Fires
d. Fires in Combustible Metals</p> |
|---|---|

4. Create a Posiive Impression at Work Area

Unit 4.1 - Personal Health & Hygiene

Unit 4.2 - Communicaion Skills

Unit 4.3 - Following Organisaion's Rules & Instruciones

Key Learning Outcomes

At the end of this module, you will be able to:

1. Describe what is Hygiene
2. Explain how to maintain good Hygiene
3. Describe Grooming Tips for men and women
4. Describe communication process
5. Define points of good writing skill
6. Define meaning of Policies and Guidelines
7. Explain Organisational procedures for reporting and documentation

UNIT 4.1: Personal Health & Hygiene

Unit Objectives

At the end of this unit, you will be able to:

1. Describe what is Hygiene
2. Explain how to maintain good Hygiene
3. Explain about Grooming
4. Describe Grooming Tips for men and women
5. Define consequences of not grooming well
6. Describe importance of grooming

4.1.1. What is Hygiene?

Hygiene, It is the process of maintaining good health through maintaining a clean body and environment around us. Good hygiene is one of the most important practices to help with the prevention and spreading of infections and diseases.

Good physical and emotional health helps our bodies and minds to function properly without pain, anxiety, depression or discomfort. Improper hygiene can cause diseases, which can negatively impact our physical & mental well-being.

Poor hygiene causes us to smell bad (due to bacteria), develop infections, and contract diseases such as flu, common cold, e-coli, Salmonella, and skin diseases such as ringworm, and scabies. Other problems such as tooth decay, lice in the hair, and foot infections are also caused due to poor hygiene.

4.1.2 How to Maintain Good Hygiene?

Following are the ways to maintain good hygiene -

- Washing hands, face, hair and other parts of body, frequently
- Brushing/cleaning teeth at least once a day
- Cleaning the living quarters including frequent change of bed sheets, pillow covers, and changing personal clothes and undergarments frequently
- Taking care to avoid soiling of clothes and body parts, when urinating, vomiting or relieving oneself in toilet
- Washing hands before eating - especially after touching animals
- Holding a tissue/handkerchief over the mouth when coughing or sneezing. If you use hands, make sure to wash them afterward
- Suppression of habits such as nose-picking, touching the face, etc.
- Not biting nails
- Washing hands after using toilet
- Shower every day with soap/body wash. Remember to also wash under armpits and feet with soap. It's important to be clean. Always clean your private areas (the hair traps sweat and can sink if not washed regularly).

- Shampoo and condition hair as needed. Most people have to wash their hair every day to prevent smell and grease. Remember to scrub your scalp and rinse all the product out of your hair until it is "squeaky" clean. Use a good smelling hair product. Keep it nice and neat.
- Use roll-on, not spray deodorant to prevent armpit odor. [Use the deodorant when you are clean, not instead of getting clean.] Put deodorant on in the morning or any time you get sweaty.
- Use a lotion to smooth out dry skin. This is optional and isn't essential, but it's good for your skin and to prevent the look of ugly, dry, cracked skin.
- Make sure to clean and clip your fingernails whenever they start getting white ends. Girls especially will notice if you have long, dirty nails. This counts for toenails, too.
- Brush your teeth after every meal and floss them at least once a day. If you're a student, be sure to brush your teeth thoroughly every morning before school. They will look much cleaner and your breath will be more fresh. Make sure to thoroughly brush your teeth AND your tongue to get all the bacteria out. Using mouthwash is also highly recommended.
- Take off your shoes as soon as you get home so they can air out and dry out.
- Wear socks when you wear shoes. Each foot sweats a lot during the day, so your shoes will smell pretty bad if you don't

wear socks.

- Wear undershirts to help keep your regular shirt smelling fresher.
- Cover your nose and mouth when you cough or sneeze. (best to do it with a tissue)
- If you're around animals of any kind, don't touch them before eating. If you do, be sure to wash your hands before eating.
- Don't lick your fingers (such as when turning pages in a book).
- Menstruating women should take care to change pads or tampons frequently.
- Carry some mints around if you have a problem of bad breath. If the problem persists, then visit a doctor; you could be suffering from halitosis.
- Hair on your chin, upper lip, ears, and nose can make you look unsightly. So remember to pluck it out when they start becoming visible on your face. Women should visit the salon every 15 days to shape up the eyebrows. Another safe and effective way is to opt for a laser surgery for removing facial hair only if it fits your pocket.
- Wear clean socks and apply some talcum powder before wearing shoes. Give your shoes some room to breathe especially after any strenuous activity. Own 2-3 pair of shoes and rotate their use. Buy a foot deodorant to help get rid of your foot odors.
- Makeup clogs up your skin pores and gives germs a chance to multiply. If you do not remove the makeup before you hit the bed, you will surely have a couple of pimples sprouting out the next day. So no matter how tired you are, you must remove your makeup before you sleep.

4.1.3 Grooming

Grooming oneself includes washing, cleansing, combing, regularly cutting and styling the hair. It also includes cosmetic care of the body, such as shaving and other forms of depilation.

4.1.3.1 Grooming Tips - For Men

1. Trim the nose hairs: This is something very basic that makes a world of difference. Many companies make nose hair clippers for a moderate price

2. Trim the eyebrows: actually even recommend getting them professionally cleaned (not shaped) to open up the eyes. Remember to brush them up before you leave for the day as this opens up the eye, keeping the face more alert.

3. Clean the hair off your ears and neck: This is something your barber can do for you monthly that gives the appearance of good grooming. The sight of long ear hairs, or neck hair going into the collar of your shirt, is never appealing.

4. Keep your nails short and clean: Dirty, long fingernails require no explanation as to why they don't work. If your budget or schedule permits, try a monthly manicure/pedicure to have someone take care of this for you. I also recommend buffing your nails as a way to keep the healthy shine without looking artificial.

5. Brush and floss your teeth daily: it doesn't matter if your teeth are not perfectly straight and white, but please keep them clean. It is rather unappealing to talk to someone and see built up plaque or food stuck between their teeth. I know this one seems simple, but trust me when I tell you to take nothing for granted.

6. Have your clothes tailored to fit your body: This is a big one, as no matter what your shape is, the right fit makes everything look so much better.

7. Stand up straight: posture is very important. You create a sense of confidence and pride when standing tall, showing everyone you are secure in the man you are.

8. Cleanse your face on a regular basis with a facial soap: I have so many male friends who use the same soap on their body that they use on their face. Most body soaps are too strong for the face. You must invest in a cleanser that is just for the face.

9. Remember less is more when it comes to fragrance: It's all right to smell good, but everyone doesn't have to smell it. Fragrance is such a personal preference, and you really must find the one that works best for you. Just remember not to bathe in it.

10. Match your belt to your shoes: This one is really simple and makes a world of difference. If you are wearing black shoes, you don't wear a brown belt. I'm not saying you need to be a fashion plate, but this basic tip makes everything you wear look that much better.

4.1.3.2 Grooming Tips - For Women

It is not just your work that talks for you, it is your gestures and how you bring yourself. Individual self-care or Personal self-care for females is as essential as it is to men. How to sit, how to talk, when to talk, what to talk, may all seem fundamentals, but keep a lot of significance.

1- Look Fresh: The first thing is to look fresh. This is the primary phase of your grooming. Have your nails nicely maintained. Prevent dressing in fancy shades that are too shiny or appealing.

2- Using Perfume: Use a mild fragrance. Too much of a fragrance may be frustrating to the individuals around you. Also, you must take care not to put on intensely fragrant products when you are in a business conference.

3- Using Makeup: Cosmetics should be easy and mild for official places of work. Use makeup that is not too little and neither too large. Do not wear too much lipstick that it propagates on the paper napkin or the cup when you take a sip of water.

4- Using Jewellery: You must not wear a lot of jewellery. Jewellery that is loud and too

huge would irritate individuals around a serious conversation. Use easy jewellery to avoid clinging earrings, huge wristbands, etc.

5- Hair Style: Your hair style should be easy and neat looking.

6- Wearing proper dress: Normally when you are at work place, you need to be presentable. At work place, with business individuals around, you should dress rather cautiously.

7- Eating in Public: Self-care also includes how you eat. Put the paper napkin on your lap. Make the lowest disturbance with the cutlery while you are consuming food.

8- Choosing Footwear: Wear comfortable and elegantly designed footwear.

4.1.4 Consequences of Not Grooming Well

One of the most effective ways we have to protect ourselves and others from illness is good personal hygiene. This means washing your hands and have a bath too. It means being careful not to cough or sneeze on others, cleaning things that you touch if you are unwell, putting items such as tissues (that may have germs) into a bin, and using protection (like gloves or condoms) when you might be at risk of catching an infection.

Personal hygiene, such as bathing, is very much dependent on the culture in which you live. In some cultures, it is expected that you will wash your body at least every day and use deodorants to stop body smells. Other cultures have different expectations.

4.1.5 Importance of Grooming

Keeping clean is an important part of staying healthy. For example, the simple act of washing hands before eating and after using the toilet is a proven and effective tool for fighting off germs and avoiding sickness.

Being clean and well-presented is also an important part of confidence for teenagers. If your child's body and breath smell OK, his clothes are clean, and he's on top of his basic personal hygiene, it can help him fit in with other people.

The following health related problems can occur if one does not maintain good personal hygiene:

4.1.5.1 Body Odor

Fresh perspiration, when allowed to evaporate does not cause body odor. An offensive smell is caused when bacteria that are present on the skin get to work on the sweat and decompose it. This is especially so in the groin, underarms, and feet or in clothing that has absorbed sweat. Diet influences the odor too. Bathing every day and changing of clothes that are in close contact with the body should take care of the problem. Talcum powders, of the non-medicated kind, can be used under the armpits. The addition of perfumes masks the odor.

Excessive perspiration can lead to the scaling of the skin or inflammation (Dermatitis). Usually, this is no cause for worry. Some people sweat more than others due to hereditary and body composition factors. Excessive perspiration may also be a symptom of diabetes, anemia, and hyperthyroidism.

Body smells are caused by some factors working in combination, including:

- Chemicals in sweat, including pheromones, which are made by the body and sexually attract (or repel) other people.
- Wastes excreted through the skin, such as metabolized alcohol.
- The actions of bacteria that live on the skin and feed on dead skin cells and sweat.
- Unwashed clothes, such as underwear and socks.

4.1.5.2 Hand Washing

Most infections, especially colds and gastroenteritis, are caught when we put our unwashed hands, which have germs on them, to our mouth. Some infections are caught when other people's dirty hands touch the food we eat. Hands and wrists should be washed with clean soap and water, using a brush if your fingernails are dirty. Dry your hands with something clean, such as paper towels or hot air dryers. You should always wash your hands:

- After using the toilet
- Before making or eating food
- After handling dogs or other animals
- If you have been around someone who is coughing or has a cold.

4.1.5.3 Bad Breath

Good dental hygiene includes regular brushing and flossing. Bad breath can be caused by diseases of the teeth, gums, and mouth, such as infections. Most people have bad breath first thing in the morning because saliva is not made while you're asleep. Bad breath proves another easily recognizable consequence of poor hygiene. It commonly develops from not regularly brushing and flossing your teeth. Bad breath results because of two main reasons. First, bacteria thrive on particles of food that can stick to your teeth. As the bacteria digest this food, their byproduct results in odor. Food can also get stuck in your teeth and rot over time, producing a foul odor,

Some foods that can cause bad breath include garlic and onion. Mouthwashes, Mouth sprays, and flavored chewing gum can make your breath smell better for a while, but if you have a health problem in your mouth, you need to see your dentist.

4.1.5.4 Smelly Feet & Shoes

Smelly feet and shoes can also be a problem for you, whether you are sporty or not. You can avoid this by giving your feet extra attention in the shower, and make sure they're completely dry before putting your shoes on. It's a good idea to alternate your shoes and to wear cotton socks instead of socks made of synthetic fibers.

4.1.5.5 Traveling Hygiene

When traveling overseas, take special care if you're not sure whether the water is safe. Suggestions include:

- Drink only bottled water.
- Don't use tap water to clean your teeth.
- When you wash your hands, make sure they are totally dry before you touch any food.
- Don't wash fruit or vegetables in unsafe water.
- If you have no other water source, make sure the water is boiled before you drink it by holding it at a rolling boil for one minute.
- Make sure any dishes, cups or other utensils are totally dry after they are washed.

4.1.5.6 Building Good Hygiene Habits

Building good hygiene habits is not a work of a day, it takes continuous efforts. The following activities should be included in daily routine – washing hands, covering mouth when coughed and having regular baths or showers.

4.1.5.7 Dental Disease

Not only can poor dental hygiene lead to bad breath, but it can also lead to dental diseases. As you allow food particles and bacteria to build up on the teeth, a coating called plaque begins to form. The bacteria in this plaque release acid, which break down the enamel on your teeth. As this process continues over time, a hard substance called calculus can form on the teeth, irritating the surrounding gums. This irritation can progress into gingivitis, leading to inflammation of the gums, which can later lead to gum disease. Gum disease causes infection and eventually may destroy your teeth.

4.1.5.8 General Disease

Hygiene practices, such as washing your hands, prove the most effective ways to prevent contracting disease and spreading disease, according to the Mayo Clinic and the Center for Disease Control and Prevention (CDC). Your hands are in constant contact with both the environment and your face, providing easy transportation from the surface of an infected object or person to your nose or mouth. Washing your hands with clean running water and soap helps reduce the amount of bacteria on your skin, lessening your chances of contracting diseases such as the common cold, influenza (flu), salmonellosis, hepatitis A, typhoid, streptococcus and staph infections.

4.1.5.9 Gender Specific

Men and women have unique hygiene needs that if ignored may lead to health problems. For example, men who have an uncircumcised penis need to regularly retract the foreskin and clean beneath to prevent inflammation, phimosis (where the penis cannot fully retract the foreskin), or penile adhesions. Women must take care to keep the genitalia clean, and always wipe from front to back after using the restroom to prevent introducing infections from the rectum to the urethra.

4.1.5.10 Traveling Hygiene

Lice are tiny insects that live on the human scalp; they make a pin prick like a puncture on the scalp, emit an anti-clotting substance and feed on the blood as nourishment. Lice thrive on unclean hair. Children are especially prone to lice infestation. Lice spread from one head to another when there is close contact, such as in school environments. Lice eggs are wrapped in a shiny white sheath and show upon the upper layers of hair as the infestation increases. They make the scalp itchy and are a cause of annoyance and embarrassment. In infants, they may cause disturbed sleep and bouts of crying. Unchecked, they can produce scalp infection.

4.1.5.11 Ear Wax

Ear wax accumulates in the ear canal that leads from the outer ear to the eardrum. As the secretion comes out of the ear, it collects dust particles. Do not reach farther than you can with your little finger into your ear to clean it. Putting in hair pins, safety pins or blunt edged objects for cleaning inner parts of the ear might harm the ear. Ear wax should be cleaned by your doctor.

4.1.5.12 Urinary Infection

The urinary infection causes pain or a burning sensation during urination. Chances of urinary infection increase during pregnancy and after major surgery. The urine can be discolored; itching, frequent urination, fever, and chills can also result from urinary infection. To avoid this infection, improve overall hygiene, both- toilets and personal parts. Wash or wipe front to back after urinating or defecating. Remember this when wiping or washing babies too, as a general rule. Do not wear tight-fitting synthetic underwear. Drink plenty of water. Do not hold back when you have the tendency to urinate. If the condition persists, consult a doctor.

4.1.5.13 Pinworms

These worms come out of the anal opening to lay eggs at night causing intense itching disturbed sleep; mild pain and diarrhea are possible consequences. When scratching, eggs stick to the hand and under the nails and infect anything the person touches. The eggs can pass through air or by contact with infected food or bed linen. The eggs cannot be killed by disinfectants and remain active in the dust for a long period. Bedclothes, undergarments, and nightwear of the infected person must be washed thoroughly in hot water. A doctor has to be consulted to treat the worm infestation; sometimes all members of the family may be asked to take de-worming medication when one member is affected. Those infected must scrub hands well with soap before eating.

4.1.5.14 Athlete Foot (Ringworm of the Foot)

A certain fungus that breeds in warm wet places-causes this infection, resulting in scaly skin or sores or blisters between toes - often spreading to the soles. Sometimes these skins crack and sores become the site for other infections. Rub off peelings gently. Wash feet well and apply powder. A mild fungicidal ointment at bedtime will help. Keep feet exposed. If you have to wear shoes, wear cotton socks; if the blisters begin to ooze seek professional help from your doctor.

Q1. Hygiene is key to ----:

- a. Good Health
- b. Various diseases
- c. Bad personality
- d. None of the above

Q2. Which of these is not a way to hygiene:

- a. Keeping hand washed
- b. Keeping hair clean and combed
- c. Keeping big and dirty nails
- d. Wearing clean clothes

Q3. Which of these is part of practice:

- a. Trimming nose hair
- b. Trimming eyebrows
- c. Wearing ironed clothes
- d. All of the above

Q3. Which of these is not part of a

Q6. Which of these is not a type of communication:

- a. Verbal Communication
- b. Simple Communication
- c. Written Communication
- d. Non-Verbal Communication

Q7. Which of these is not a symptom of Poor Communication:

- a. Poor planning or workload
- b. Lateness
- d. Poor work quality

Q8. Which of these is part of good writing skill:

- a. Be convincing
- b. Be complete
- c. Be brief
- d. All of the above

policy:

- a. Leave Policy
- b. attendance policy
- c. Naional Security policy
- d. Safety policy

Q5. Which of these should be part of the organisaional procedure for reporing:

- a. The Format of report
- b. Who will create
- c. Towhom it should be submitted
- d. all of the above

Q9. Which of these is not a communicaion barrier:

- a. Assumption
- b. Use of jargon
- c. Clear pronunciaion
- d. Language Difference

Q10. Which of these is part of Active listening:

- a. Listen for ideas
- b. No clarity in content
- c. Accuracy in spellings
- d. All of the above

Bhiya Valli Shakti Vikasaka:

- Feet together, stand erect with the arms by the sides.
- Inhale, raise both arms straight up with the palm facing outward. Palm must not touch the head
- Exhale, bring the arms down. Palm must not touch the things.

Benefit : Regular practice given great strength to the arms muscles and should joint.

- Vaksha Sthala Shakti Vikasaka I

Techniques:

- Feet together stand erect, arms by the sides.
- Place the palm on the thigh.
- While inhaling raise your hands up and bond backward as far possible.
- Five times to begin with

Vaksha Sthala Shakti Vikasaka-II

- Feet together, stand erect, arms by the sides.
- Raise both arms upto the should leve, keep the palms opposite to each other.
- Inhals, no bound backwards as far as possible and stretch your arms behind so that palms facing to each other.
- Exhals come back to starting position
- Five times to begin with.

Benefit :

- This practice is help to expand the chest and becomes gibes vitality to the back and neck.
- It is good for arms strengthening.

[Type text]

Saruanga Pushti

- Feet wide apart, first with thumbs tucked in.
- With are wrist upon the other, bond to ward the ankle of right leg.
- Inhale through nose, raise arms backward forward with a ajemicircle and bringh them down towards left ankle.
- Inhale when coming down & exhale while rising.
- It is to be done way slowly.

[Type text]

Pusna Bhija SHakti Vikasaka:

- Feet together, stand erect and clench your first with thymes inside
- Inhale amd retaom, rotate both arms from forward to backward.
- Exhale with juk arm bent at elbow and breath
- Repeat from backward to forwad.

Pindali shakti Vikasaka:

- Feet together, stand erect, your hand clenched into first
- Inhale through nose, squat with your arms held out in front of the knee.
- Hold the breath come up standing position rotate the arms from forwarding to backward bending at elbow, Exhale sharply while pealing the arms
- Benefit Developing the strength of the calves downward
- Hard ghati (Eggan Daus)
- Stand erect
- Bend the right hand and weight leg.
- With exhale change the hand and leg positing with
- While jumping fect must touch the buttocking by bending the knees
- Breath in aid out sharpy and deeply thorough wase to produce the hissing sound of engine.
- One should do this for 5 minutes to obtain energy.